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His Excellency the Governor, Sir Anthony Abell, K.C.M.G., speaking at the opening of Radio Sarawak, 7th June, 1954.

SARAWAK

ANNUAL REPORT

1954

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ERRATUM

The men shown in the picture facing p. 142 are members of the Sarawak Constabulary Field Force and not the Sarawak Rangers as stated in the caption.

PART I

I

GENERAL REVIEW OF THE YEAR

THE most important event of the year in Sarawak was almost certainly the inauguration of the Sarawak Broadcasting Service.

Broadcasting House was opened by His Excellency the Governor on June 7th at a Ceremony at which were broadcast messages of congratulation and goodwill from, among others, H.R.H. the Duchess of Kent and H.H. the Rajah. During the short time it has been in operation this service has begun to play an important part in the life of Sarawak; it seems certain that its importance will increase and that the value to the community of local broadcasting, conceived in 1952 in doubt and misgiving, is now beyond doubt. Broadcasting House itself was built from Colonial Development and Welfare funds and the building bears a brass plaque with a simple notice describing it as a gift from the people of the United Kingdom to the people of Sarawak. The frontispiece of this report is, appropriately, a photograph of His Excellency the Governor, Sir Anthony Abell, at the microphone at Broadcasting House; on another page will be found what is today a typical longhouse scene, a young Iban girl listening to a wireless programme.

New building has contributed during the year to the changing face of Sarawak's towns; the most important single items are the new Government Offices and Customs Godowns at Sibu, and the new Secretariat Building at Kuching. The latter, a modern building air-conditioned throughout, represents a great improvement on the old Secretariat buildings, which are now being reconstructed prior to reverting to their original function as Judges and Magistrates courts.

It was not a year in which striking or startling changes took place in the financial economic situation of the territory. There were no great changes in the main heads of revenue and expenditure, set out in some detail in a later chapter of this report.

Revenue benefitted by over \$2 million from an unanticipated windfall—the export duties upon the product of an extremely heavy crop of illipe nuts. The illipe nut is a wild fruit which produces a valuable vegetable oil but comes into bearing at irregular and unpredictable intervals; the 1954 crop was, according to tradition in this matter, the heaviest for over thirty years. A sharp increase in the value of rubber during the last three months of the year was reflected in a rise of returns from import and export duties. It was clear before the end of the year that the revenue totals would exceed the estimates for the year, but a study of the territory's full commitments upon its development plan and for the expansion of social services indicated that new taxation was necessary. There was, therefore, introduced in the December (the Budget) Session of Council Negri an amendment of the Schedule to the Trades Licensing Ordinance making very substantial increases in the rates of fees payable.

Nor was there much change in the occupations and wages or labour organizations of the Sarawak people. Over the whole year there was a slight fall in the cost of living index figure; there was full employment throughout the year; towards the end of the year there was increasing activity and more labour employment in the tapping of rubber. There were no industrial disputes or wage disagreements of any consequence or magnitude.

Important work was done during the year in the field of land utilisation and tenure. A great accumulation of survey and land settlement work created partly by the unrestricted movement of population during the Japanese occupation and partly by expansion and movement of population during the last eight years has not substantially diminished, but it has been possible to increase the strength of the Land and Survey Department, to give some members of the staff, by study leave and otherwise, improved training and to give considerable thought to the modifications of existing land policy which contemporary circumstances demand. An important event was the approval in the Colony's Development Plan for the period 1955—1960 of funds for large scale land utilisation surveys and for the purchase of land required for planned sub-division.

Agricultural and forestry exports, as stated above, remained at much the same level as in 1953; agricultural production for

internal consumption was not so fortunate. The rice crop harvested in the spring of the year was average although planting had been affected by a persistent period of drought in August and September, 1953; clearing and planting during 1954 was, on the other hand, severely impeded by persistent and excessive rains which, not only reduced the areas planted throughout the whole countryside but later in the year, caused damage by flooding of swamp padi areas. Some progress was made during the year in arranging for investigations into the sudden death disease of pepper, and it is hoped that a research unit will be in action in the territory in 1955.

The Veterinary Branch of the Agricultural Department, which came into being in 1953 with the appointment of a Veterinary Officer, was active throughout the year beginning a survey of the livestock population and the disease problems of the territory. Plans were completed for the erection of a Veterinary Clinic in Kuching.

The abnormal rainfall also had serious and expensive results as far as the territory's public works programme was concerned. Construction work and more particularly work on roads was seriously delayed; the Bau Road, which might in a more normal year have been completed well before the end of 1954, still required three months or more work done before completion when the year finished; the cost of construction having also, of course, increased very substantially. Great damage was also done to the road system in Kuching town and the metalling and reconstruction of roads in the Third Division was seriously delayed.

In spite of the special and unusual handicaps presented by the climate during 1954, the Public Works Department succeeded in completing works to the value of nearly \$14 million. Reference has already been made to new buildings; other important works included the virtual completion of the preliminary works for the road from Serian to Simanggang; the laying of several miles of twenty inch diameter water piping and the preparation of the site for the waterworks for the new Kuching water supply; the successful prospecting for underground water in the Lower Rejang which will bring piped water to Sarikei and Binatang; a new water supply at Mukah and the location and establishment of quarries in various parts of the country in preparation for major works in 1955.

In air communications the most noteworthy event was the initiation of an internal feeder service with a scheduled service to Miri, linking it to Brunei and North Borneo. New terminal buildings at Sibü were opened at the beginning of the year. Construction of an airfield at Bintulu was also started.

Very considerable progress was made with the development of the new V.H.F. internal telephone service, 12 stations being brought into operation during the year. It is hoped that by the end of 1955 the greater part of the country will be linked by V.H.F. telephone to the principal towns and the capital.

Considerable progress was made during the year in the organization and rationalization of road transport by the use of the controls provided in the Road Traffic Ordinance, 1953. The most noteworthy achievement has been the re-organization of the passenger transport services in the First Division, where three limited liability Companies now hold franchises covering the whole Division, provide services over specified roads with approved fares and timetables, and are substituting, in accordance with an approved programme, 25/30 seater buses for the large fleet of independently owned "mosquito" buses, which previously provided an irregular and unsatisfactory service and created a variety of traffic problems and difficulties.

The most notable development in the medical field was the opening, in Kuching, of the new Health Centre, a modern building with general departments for male and female out-patients and sections for pre-natal and dental patients; at the end of the year some 500 out-patients were attending daily. The Department succeeded during the year in overcoming some of the recruitment and staff difficulties which had handicapped its efforts in 1953, and one of the most pleasing features of this improvement has been the success in recruiting to the Department from the up-river native peoples. The year's work confirmed that the appointment of the Travelling Superintendents was fully justified, and good results have followed from their very extensive movements in interior and remote areas previously untouched by western medicine. Other interesting features of medical work during the year were the successful progress of the W.H.O. assisted anti-malarial project on the Baram River, and the concentrated attacks in single selected areas on yaws and trachoma, reported on in

some detail later in this report. Special mention must also be made of the Leper Settlement where the effect of new drugs, and the good hope of eventual cure which every patient now has before him, has produced a complete change in outlook and morale.

Insanitary and overcrowded housing conditions in towns and bazaars have always been important contributory factors to ill-health in Sarawak. Progress in housing in Sarawak in 1954 was not spectacular although some construction was completed in Miri and Sibü. The most important work undertaken during the year was the completion of the plans for large scale low income housing schemes in Kuching; most of the constructional and financial details had been settled by the end of the year and it is hoped that the building of a large number of new houses and flats will be well advanced before the next Annual Report comes to be written. The first stage in the Kuching plans, which provide for the erection of over five hundred units, is substantially financed by grant and loans from the Central Government to the Kuching Municipality.

In Education also the year has been one of planning rather than achievement, but some achievements require special mention. The staff position improved and it was possible for an Education Officer to remain in charge of all the four Divisional Offices throughout the year, while additional supervisory staff was engaged. The Batu Lintang Teacher Training Centre produced the highest number of qualified teachers in any year since its opening. The figures for enrolment of children in schools, given elsewhere in this report, show that the steady increases of previous years were maintained during 1954, although there was unfortunately no great change in the spread of primary education among the native peoples. There was unfortunately evidence that communist propaganda in the Chinese schools was increasing; more young Chinese students left Sarawak for China during 1954 than in any previous year and there was evidence that in a number of schools the process of inoculation of students with communist ideas, and with hostility to established order both inside and outside the schools, had reached an advanced stage.

It has for some time been clear that the whole system of financing education in the territory required review and revision.

Sarawak was fortunate in obtaining the services of the Director of Education, Kent County, for the preparation of a report and recommendations. He visited the territory in September and October; his report was received at the end of the year and some at least of the recommendations contained therein will almost certainly be put into effect during 1955.

One probable result of the proposed changes in the system of financing primary education will be that Local Authorities will be able to engage in other fields of activity at present untouched by them. This potential expansion of activities in future years is well timed, since 1954 saw completed the planning of a considerable extension of Mixed Local Authorities, i.e. Authorities upon which all races within their jurisdiction are represented. Plans were complete at the end of the year for the constitution of new Mixed Authorities, some of which were due to come into being on January 1st, 1955, and others later in the year. These included new Authorities in the Lower Rejang and the southern extremity of the Third Division, which bring the whole of that large area of Sarawak under the jurisdiction of Mixed Authorities; others proposed for constitution later in 1955 included the Lundu and Bau districts in the south-west corner of Sarawak and areas in the Second and Fourth Divisions. Most of the work in this field during 1954 was in the planning of these new developments in 1955. Three racial authorities were however converted to Mixed Authorities during the year and one new Mixed Authority was formed; it is estimated that some 260,000 people are now subject to the jurisdiction of Local Governments and this figure will increase very substantially at the beginning of 1955.

The year saw noteworthy improvements in recruitment and morale of the police force, and a steady programme of re-training continued. Three platoons of the Field Force completed their training during the year and a new Field Force platoon camp was established at Miri. Police transport has improved considerably and the Constabulary Band was as popular as ever.

Sarawak continued to maintain its astonishingly good crime record; the average number of persons imprisoned in any one month of 1954 was only 138.

Details are given later in this report of the activities of the Sarawak Rangers who continued to serve with distinction in

The New Secretariat Building in Kuching, flood-lit on the night after it was opened, 9th October, 1954, by His Excellency the Governor.



Anna Photo

Meeting of the Sarawak Branch of the Commonwealth Parliamentary Association, attended by Representatives from Singapore, the Federation of Malaya and North Borneo, held in Kuching, 26th April, 1954.



Malaya, attached to units of the British Army in the Malay Regiment.

1954 was a year of particular importance to the Sarawak Museum and the activities which it supervises. Work was begun on a new wing to the Museum; and the Antiquities Ordinance came into force. It was a year of great interest insofar as the Museum's archaeological activities were concerned and the work of the Museum staff on the Niah caves excavations, illustrated later in the report, produced results of the greatest interest and value.

During the year, Sarawak had the pleasure and privilege of welcoming a number of very distinguished guests. In September, a delegation of the Commonwealth Parliamentary Association, led by the Right Honourable Ralph Assheton, M.P., and including The Reverend R. W. Sorensen, M.P., Sir Robert Boothby, K.B.E., M.P., Sir Roland Robinson, K.B., M.P., and Mr. P. Morris, M.P., visited Kuching and other Sarawak centres. The visit coincided with a meeting of Council Negri and it was possible to organise a meeting of the local branch of the Commonwealth Parliamentary Association to greet these distinguished visitors. Visitors from the Colonial Office included Sir Thomas Lloyd, G.C.M.G., K.C.B., Permanent Under-Secretary of State for the Colonies, and Lady Lloyd and Sir John Martin, M.C.M.G., C.B., C.V.O. Visitors from Singapore and Federation included The Right Honourable Malcolm MacDonald, Commissioner-General, and the Far Eastern Commanders-in-Chief of all three branches of the Services. A number of Her Majesty's vessels visited Kuching, Sibü and Miri.

The Governor of Sarawak, Sir Anthony Abell, K.C.M.G., proceeded on leave in October; during his absence the Colony was administered by Mr. C. J. Thomas, C.M.G.

DEVELOPMENT

In 1954 a new Development Plan for the period 1955-1960 was announced and approved by the Council Negri at its meeting in August. This development plan, Sarawak's third since 1947, reviewed progress achieved during the seven years of planned development and outlined the programme for the next six years commencing in 1955. It is not an entirely new plan but a revision and extension of previous plans with the aims and objects modified to meet changing conditions.

Progress achieved in development work is touched on in several paragraphs in this Chapter and in subsequent Chapters of this Report. A separate Report on Development is also published annually by the Development Board. Expenditure under the Development Plan is given in detail in an Appendix to this Report and may be summarised as follows:—

	<i>Actual Expenditure to 31.12.54</i>	<i>Estimated Expenditure in 1955</i>
Colonial Development and	\$	\$
Welfare Grants	9,162,997	2,460,516
Colony Funds	26,410,651	24,771,139
	<hr/>	<hr/>
Totals	\$35,573,648	\$27,231,655
	<hr/>	<hr/>

Expenditure on development work in 1954 equalled almost the total expenditure up to the end of 1953. Development expenditure is being increasingly met from Sarawak's own funds.

The development programme for 1955-60 calls for expenditure of approximately \$100 million. Of this total sum Communications schemes amount to approximately \$54 million or 54% of the development programme.

PART II



Hedda Morrison

A Malay fisherman's daughter at Kabong, Second Division

I

POPULATION

A FULL-SCALE census was conducted during 1947. The total population of Sarawak in 1947 thereby disclosed was 546,385.

The main indigenous cultural groups in Sarawak may be classified as Sea Dayak (or Iban), Malay, Melanau, Land Dayak, and a last group of other and indeterminate tribes comprising Kayans, Kenyahs, Bisayahs, Kedayans, Kelabits, Muruts and many others. The non-indigenous races include Europeans, Chinese, Indians and Javanese. In the census, indigenous people were defined as "those persons who recognise no allegiance to any foreign territory, who regard Sarawak as their homeland, who believe themselves to be part of the territory, and who are now regarded as natives by their fellow men."

The following table shows the numerical proportion of each cultural group as determined by the 1947 census:—

<i>Cultural group</i>	<i>Population</i>	<i>Percentage of total population</i>
Sea Dayak	190,326	34·8%
Chinese	145,158	26·6%
Malay	97,469	17·9%
Land Dayak	42,195	7·7%
Melanau	35,560	6·5%
Other Indigenous	29,867	5·5%
Other Non-Indigenous Asian	5,119	0·1%
European	691	0·1%
	<hr/> 546,385 <hr/>	<hr/> 100·0% <hr/>

The indigenes of Sarawak form 72·4% of the population. The Sea Dayak group is the largest and probably the most

homogenous of the indigenous people. Very strong local variations appear in the Sea Dayak language, yet it is distinctive and well-recognised as a native language of Sarawak.

The Land Dayaks are mainly to be found in the First Division. The legendary home of these people is believed by many of them to be "Gunong Sungkong" in West Borneo, and a close relationship is claimed and exists with people of the same culture in nearby villages in West Borneo. This kinship leads to some movement across the border.

The Malays are mixed stock and probably are the least native of all the indigenous people. They are bound by the common tie of Islam and have been powerful along the coast for centuries. Their domination was intermittent and at times must have been almost non-existent, but it was sufficiently effective to leave an impression upon the pagan tribes of the seaboard.

Numerically the Chinese are the second most important group of people in Sarawak; economically they take first place and culturally their influence is second only to European. There is substantial evidence that Chinese have lived in parts of Sarawak for many hundreds of years.

The Melanaus are found in the coastal areas of the Third and Fourth Divisions, and are the principal cultivators of sago. At the present time they are intermediate between the Malays and the pagan groups, in that some of them retain their pagan customs and habits, while others have become Muslims.

The Kayans and Kenyahs live on the Baram River and the headwaters of the Rejang and Balui. They are thought to have come from the Batang Kayan across the Indonesian border.

Other indigenous races are the Muruts, Bisayas, Kelabits, nomadic Punans, Kedayans, and Dusuns from North Borneo.

The estimated population at the 30th June 1954 was 601,958 made up as follows:—

Sea Dayak	194,977
Chinese	174,618
Malay and Melanau	147,129
Land Dayak	46,234
Other Indigenous	31,166
Other Non-Indigenous	7,834
	<hr/>
	601,958
	<hr/>

These figures are based on the 1947 Census together with the numbers of births and deaths registered since that date and the volume of migration to and from the Colony. The comparative figures for 1953 show very considerable discrepancies due to their having been calculated on a different basis.

IMMIGRATION

The increase in population is due to natural causes. As the table below shows, a satisfactory balance of emigration and immigration was maintained during 1954.

The excess of Chinese leaving the Colony over those entering was due to the fact that during the first six months of the year a considerable number returned permanently to China, while immigration restrictions prevented any comparable influx.

Migration to and from Sarawak during 1954 was as follows:—

	<i>Arrivals</i>	<i>Departures</i>
Chinese	5,110	5,739
European	1,981	1,957
Malay	855	831
Melanau	1	—
Sea Dayak	466	620
Land Dayak	3	—
Other Indigenous	12	24
Other Asian	649	651
	<hr/>	<hr/>
	9,077	9,822
	<hr/>	<hr/>

II

OCCUPATION, WAGES AND LABOUR ORGANISATION

DURING the year there was little change in the overall picture of occupation in the Colony. The majority of the population continues to be engaged in agricultural pursuits. The indigenous tribes are almost all padi farmers but also frequently cultivate small rubber or sago plantations and collect jungle produce such as rattan, jelutong and damar (resin). The Chinese agriculturalists rely on rubber and pepper and with the low price prevailing for rubber during the first ten months of the year many had ceased tapping rubber and were absorbed in padi or pepper planting or the timber industry. The increase in the price of rubber towards the end of the year may reverse this trend.

Malays and Melanaus are largely employed in the sago and timber industries, whilst Dayaks, when not busy on their padi farms, are employed as log extractors in the forests, on road work or as unskilled labour in the oilfields.

The timber industry continued to expand and whilst a number of the smaller and more temporary mills closed down, the output of the larger and more settled mills so expanded that there was an increase in production of 40% over the 1953 figure. The oil industry in Seria continued to employ Dayak labour from the 2nd and 3rd Divisions. Some 600 Dayaks are so employed and to ensure the minimum disruption to their longhouse economy the recruitment is for a period of one year only, and those who are recruited must agree to send a monthly remittance to their dependents in the longhouse.

The construction of public and private buildings in Kuching and the larger towns and the extensive development programme of the Government continued to absorb considerable numbers of both skilled and unskilled workers. Sago production, logging, dockwork and the distribution of imported goods made up the rest of the field of organised employment in these urban localities.

A careful check is kept on the entry of skilled labour into the Colony. All permits are for limited periods and are granted only to enable the completion of a specified task and the training of a local worker in the same project.

There is ample demand for labour and therefore no unemployment in the Colony. Pepper production and the timber industry have lessened the effect of the low price of rubber during 1953 and the first half of 1954, but the increase in price of rubber towards the end of the year will undoubtedly create increased activity. Nevertheless the aim is to promote industries other than rubber and, by such diversification, to produce an economy less dependent on the vagaries of a single crop.

The Sarawak Oilfields Limited and the British Malayan Petroleum Company, with headquarters at Seria, are the largest employers in Sarawak and in the State of Brunei. At the end of the year there were 3,855 skilled and 2,874 unskilled workers employed direct by the companies, while some further 2,580 skilled and unskilled workers were employed by the companies' contractors. The total was composed of Chinese, Malays, Dayaks and Indians roughly in the proportion of 4-4-1-1.

The basic rate of pay of the companies' workers ranged from \$3.56 per day for unskilled workers to \$9.30 for the highest skilled artisan. Additional features of the company's wage policy include a temporary cost of living allowance at the rate of 20% and 25% respectively for Sarawak and Brunei; outstation allowances where living accommodation, amenities etc. are temporarily below the standard provided elsewhere; diving allowance; allowances for work of an exceptionally dirty nature and other payments of this nature. Hours of work are 43½ per week and overtime is paid at 1½ times the ordinary rate. Employees receive annually a week's leave with pay and when absent from work through sickness, receive full pay for the first four weeks and half pay for the subsequent eight.

The companies made further progress with their labour force housing schemes and maintained their high reputation by providing for their employees such amenities as health and medical services, clubs, playing fields, cinemas and free transport.

An effective channel of communication exists between the companies and their workers. Elected labour force representatives meet the management once a month and discuss working conditions, disputes, grievances and other matters affecting mutual relations and understanding. In 1955 these labour force committees are being extended in number and management representation will be further broadened and strengthened.

The companies run both a technical trade school at Seria and an apprentice training scheme at Lutong (Sarawak). The former is a three year apprentice course and gives a practical training in fitting, turning, mechanical engines, welding and blacksmithing, and theoretical instruction in mechanics, workshop practice, electricity, mathematics and machine drawing. The apprentice scheme in Sarawak is less elaborate. It makes use of the system of training on the job and there are eighty-nine apprentices who are really trade trainees. The scheme is under active review and consideration will be given to the introduction of a preparatory trade school in the near future. Both schemes aim at the eventual promotion of the trainees to the higher technical posts in the company.

Limited training schemes are carried out in Government technical departments. The Agricultural department is now training nineteen men as Agricultural Assistants at the Staff Training College. The Public Works Department is training over one hundred young men in the various fields of engineering whilst the Brooke Dockyard has fifteen apprentices working on the repair and overhaul of marine diesel engines and ships' auxiliary machinery.

The larger timber companies continued to improve the living conditions and amenities afforded to their employees. In the Rejang River some of the larger Chinese sawmills have erected labour lines comparable to European managed factories. In these and other new industries in Kuching such as the Matang Vegetable Oil Factory, a new ice factory and a steam laundry, there is welcome evidence of better mechanical equipment and an awareness of the need to ensure the protection and welfare of their employees. Labour relations are generally good and the general trend is a gradual move towards industrial development on modern lines.

Hours of work in the main industries remain unchanged and are governed by the eight hour day and the six day week as provided in the Labour Ordinance.

The general level of wages has been maintained. During 1953 the cost of living fell slightly in the oilfields and in the south of Sarawak. In Kuching there was a drop of thirteen points in the prices index which in 1953 was on the average thirty-five points above the basic figure of one hundred taken in August 1950.

There was little change in the wages earned in particular industries throughout the country. The earnings of a rubber tapper remained low and averaged \$2.54 a day compared with \$2.52 for the previous year. This included perquisites in the form of free housing and other amenities. Carpenters can still earn \$8.00 a day. The average rate in the sawmills is \$5.00 a day and in road and building construction \$6.00 a day. Wharf labourers were earning an average of \$236.84 a month at the end of the year. The basic rates in the oilfields were \$6.54 a day for skilled workmen and \$4.02 for unskilled. This compared with \$6.64 and \$4.08 a day respectively for the year 1953.

The Protector of Labour for Sarawak, appointed in May 1954, is also the Controller of Labour for Brunei and is stationed in the oilfields at Kuala Belait. All District Officers are Deputy Protectors of Labour and are responsible within their districts for enforcing labour legislation and for the periodical inspection of factories.

An up to date Labour Ordinance embodying the principles of the International Labour Conventions exists. Enacted in 1952, it gives workers protection in such matters as hours of work, health conditions, the age of admission to employment, medical treatment, provision of written contracts of employment, notice pay and conditions of extra-territorial recruitment.

Four more Trade Unions were registered in 1954 bringing the total number in existence to twenty five. The older and bigger unions continue to develop satisfactorily though some of the smaller ones are too limited in scope and numbers to be very effective. Considerable importance is attached to the healthy

growth of the Trade Union movement in the Colony and to this end the Government has appointed a specially trained officer to the post of Registrar of Trade Unions.

There were no individual disputes of note in the Colony during 1954. Minor cases of wages disagreements were settled without difficulty by either the Protector or Deputy Protectors of Labour. Industrial disputes are rare. There has been no labour unrest for a considerable time and there seems no reason to fear it in the near future. Demand for labour is in excess of supply and wages are generally high.

III

PUBLIC FINANCE AND TAXATION

REVENUE AND EXPENDITURE

Comparative figures of Revenue and Expenditure for the years 1953 and 1954 are

	<i>Revenue</i> \$	<i>Expenditure</i> \$	<i>Surplus</i> \$
Actual 1953	43,688,312	34,280,449	9,407,863
Actual 1954	43,800,621	33,264,706	10,535,915

A sum of \$12,000,000 was transferred to the Development Fund from Surplus Balances in 1954 and the General Revenue Balance at 31st December 1954 was \$63,805,452.

REVENUE

The main heads of Revenue are as follows:—

<i>Ordinary Revenue</i>	<i>Actual</i> 1954 \$	<i>Actual</i> 1953 \$
Customs	22,838,906	23,235,410
Licences, Taxes & Internal Revenue	2,087,756	1,748,968
Fees of Court or Office, etc.	980,629	1,010,210
Departmental Services	734,722	603,082
Reimbursements	264,201	470,426
Land	702,842	545,114
Forests	1,198,365	1,155,254
Posts and Telegraphs	666,818	859,148
Marine	234,357	241,013
Municipal (Outstations)	286,636	250,824
Revenue from Government Property	1,121,067	679,101
Interest	3,548,697	2,554,500
Income Tax	6,465,248	9,613,249
	[41,130,244]	[42,966,299]

Extraordinary Revenue ...

Land Sales	406,012	291,257
Loan Repayments	94,790	122,082
Sales of Investments	45,225	22,963
Custodian of Enemy Property	2,124,350	—
War Damage Compensation	—	285,711
	[2,670,377]	[722,013]
Total	<u>\$43,800,621</u>	<u>\$43,688,312</u>

EXPENDITURE

The Heads of Expenditure are as follows:—

<i>Heading</i>	<i>Actual 1954 \$</i>	<i>Actual 1953 \$</i>
Governor	125,403.79	128,216.33
Rajah's Dependants	113,839.45	116,927.48
Administration	2,193,701.36	2,142,949.99
Agriculture	749,549.37	672,659.26
Audit	90,281.29	90,199.18
Boys' Home	30,476.38	25,709.42
Civil Aviation & Meteorological Service	243,634.19	196,882.72
Chinese Affairs, Immigration and Labour	157,253.00	164,612.52
Constabulary	3,381,329.82	3,230,386.04
Contribution to Development Fund	5,798,551.00	8,900,000.00
Co-operative Development	183,807.17	128,842.26
Defence and Internal Security	31,676.26	93,243.20
Education	1,042,137.11	769,291.67
Forests	348,821.19	321,541.58
Judicial	252,606.22	208,889.37
Lands and Surveys	2,232,615.74	1,946,552.08
Legal	78,309.01	72,831.10
Local Authorities	449,633.46	370,309.76
Marine	908,669.91	962,597.75
Medical	3,219,526.72	2,881,597.61
Miscellaneous Services	1,141,730.03	1,183,045.59
Municipality of Kuching	618,683.60	405,345.41
Municipal, 1st Division	12,802.02	18,550.00
Municipal, 3rd Division	96,087.40	77,272.32
Municipal, 4th Division	105,245.64	101,998.42
Museum	87,790.63	85,876.08
Pensions and Gratuities	1,313,912.19	1,207,574.88
Posts and Telegraphs	811,412.71	1,004,477.65

Printing	468,428.62	481,023.45
Prisons	278,415.23	280,825.87
Public Works Department	1,330,332.66	1,746,213.21
Public Works Recurrent	1,855,632.29	1,174,525.65
Public Works Non-Recurrent	1,236,619.50	1,156,447.56
Secretariat	1,064,800.82	764,856.44
Trade and Customs	845,169.73	761,824.23
Treasury	365,820.37	398,123.12
War Damage Claims Commission	—	8,230.00
	<u>\$33,264,705.88</u>	<u>\$34,280.449.20</u>

ASSETS AND LIABILITIES

STATEMENT OF ASSETS AND LIABILITIES AS AT 31ST DECEMBER, 1954

<i>Previous Year</i>	<i>Assets</i>	
\$ 2,815,508.32	Cash	\$ 2,398,822.64
66,672.46	Fixed Deposits with Chartered Bank, Kuching	67,844.53
51,471,428.60	Joint Colonial Fund	4,080,266.11
	General Investments:—	
	Sterling Securities at middle Market value	\$71,896,335.74
30,001,754.71	262,988 Shares in the Sarawak Electric Supply Co. Ltd. at cost	262,988.00 72,159,323.74
	Investments on behalf of Special Funds:—	
	Sterling Securities at middle Market Value	\$ 5,190,269.56
552,535.21	Deposits with Joint Colonial Fund	445,932.76 5,636,202.32
—	Allotments	25,508.04
3,260,867.72	Advances	4,054,295.86
1,562,944.93	Current Accounts	191,327.41
—	Drafts and Remittances	318,646.07
801,404.60	Remittances between Chests	228,866.68
51,084.18	Suspense (Sarcon)	24,103.88
<u>\$90,584,200.73</u>		<u>\$89,185,207.28</u>
	<i>Liabilities</i>	
3,327,694.09	Deposits:—	
	Security Deposits	\$ 197,535.58
	War Damage Claims Commission	29,613.39
	Miscellaneous	833,531.39 \$ 1,060,680.36
1,263,401.93	Trading Account—Food Control	1,351,743.67
20,766,138.55	Special Funds	21,889,138.12
507,547.82	Current Accounts	754,145.65
1,012.12	Allotments	—
380,207.23	Drafts and Remittances	—
* —	Colonial Development & Welfare Over-issues	324,196.80
	General Revenue Balance:—	
	Balance as at 1-1-54	\$64,338,198.99
	Less transfer to D.W. & R. Fund	12,000,000.00
		<u>\$52,338,198.99</u>
	Add Surplus & Deficit Account	10,536,065.19
	Add appreciation of Investments	\$62,874,264.18
		<u>931,188.36</u>
64,338,198.99	Balance as at 31-12-54.	63,805,302.68
<u>\$90,584,200.73</u>		<u>\$89,185,207.28</u>

* Previously shewn under "Special Funds".

Public Debt

There is no public debt but at 31st December, 1954, a sum of \$3,275,200 had been charged to Advances in anticipation of loans to be raised. This sum was spent in the purchase of shares of the Sarawak Electricity Supply Company, Limited, which is now wholly owned by the Government.

Customs Tariff

The Customs Tariff is divided into two parts namely Import Duties levied on tobacco, liquor, petroleum products, textiles and a variety of other commodities; and Export Duties levied on rubber, sago, pepper, jelutong, illipe nuts, copra, damar and edible birds' nests.

There was no change in the tariff in 1954.

EXCISE, STAMP DUTIES AND OTHER TAXES

Excise duty is levied on locally manufactured arrack, certain wines, and matches.

Stamp Duty

Stamp duties are imposed on all documents required to be stamped under the provisions of the Stamp Ordinance (Cap. 17) and include a stamp duty on Cheques, Bills of Exchange, Promissory Notes, Agreements, Contracts, Affidavits, Declarations of Trust and Instruments creating an Annuity.

Income Tax

Income Tax is charged, levied and collected under the provisions of the Income Tax Ordinance, 1949 (No. 16 of 1949) but at present only in respect of the incomes of companies incorporated or registered under any law or charter in force in Sarawak or elsewhere. On every dollar of the chargeable income of such company for the year of assessment, tax is levied at the rate of thirty per centum.

Trade Licence Fees

The Trade Licensing Ordinance (No. 17 of 1949) is a corollary of the Income Tax Ordinance and extends a simple form of direct taxation by way of trades licence fees to certain business

sections of the community. The amount of the fees to be paid varies considerably according to the nature of the business and the locality in which such business is situated, the fees in rural areas being at a reduced rate. The fees in 1954 ranged from \$2,500 per annum for a licence to carry on the business of a banker to \$25 per annum for a licence to carry on the business of a retailer trader not engaged in any import trade and situated in a rural area, but substantial increase in tax rates to be introduced in 1955 were approved by the Governor in Council and subsequently by Council Negri at the Budget Session in November. Where the income from any business is directly charged with Income Tax, no Trades Licence fees are payable.

Head and Door Tax

Head tax at the rate of \$1 per adult male is paid by all Malays and some Dayaks; most of the Dayak communities pay a "door" tax of \$1 per door, the "door" being the apartment in a Dayak longhouse occupied by a single family. In areas where Local Authorities have been established these taxes are collected by the Local Authorities and the Government remits the bulk of the collection to the collecting agents.

Entertainment Tax

A tax is charged on all payments for admission to any entertainment.

Estate Duty

Estate Duty is charged upon all estates the value of which exceeds \$1,000 and the rates remain unchanged. They are as follows:—

Where the value of the estate exceeds:—

\$ 1,000 but does not exceed \$	3,000	1	per cent
\$ 3,000	" " " "	1 ½	" "
\$ 5,000	" " " "	2 ½	" "
\$ 7,500	" " " "	3 ½	" "
\$10,000	" " " "	5	" "
\$20,000	" " " "	7 ½	" "
\$40,000	" " " "	10	" "
\$70,000	" " " "	15	" "
Over \$100,000		20	" "

IV

CURRENCY AND BANKING

SINCE 1945 Malayan Currency only has been issued in Sarawak. No new issue of Sarawak Currency is intended. Until 31st December, 1952, the following currencies were legal tender in Sarawak:—

Malayan

Sarawak

British North Borneo (Chartered Company)

By virtue of the Currency Ordinance, 1951, Sarawak and British North Borneo (Chartered Company) notes and coins are being withdrawn from circulation and ceased to be legal tender after 31st December, 1952. With effect from 1st January, 1953, only the notes and coins issued by the Board of Commissioners of Currency, Malaya and British Borneo, are legal tender in Sarawak.

At the 31st December, 1954, there were \$30,310,956 of Malayan currency in circulation and \$754,267 of Sarawak currency, composed of \$284,538 in notes and \$469,729 in coins. There was an increase of \$1,750,000 Malayan currency in circulation during the year. \$4,160 of Sarawak currency composed of \$3,736 in notes and \$424 in coins, was withdrawn during the same period.

Banking

Banking facilities are provided by the Chartered Bank of India, Australia and China, in Kuching, Sibü and Miri and the Oversea Chinese Banking Corporation in Kuching. In addition there are four Chinese Trading Banks in Sarawak; the Bian Chiang Bank, the Kwong Lee Bank, the Wah Tat Bank and the Hock Hua Bank.

Post Office Savings Bank

The number of depositors in the Post Office Savings Bank at the end of 1954 was 6,839 as compared with 6,085 at the end of 1953. The amount of credit to depositors was \$3,391,897.28 as against \$3,074,770.67 in 1953.

During the year deposits exceeded withdrawals by \$289,370.82.



A Chinese shop in Sibu

Hedda Morris

V

COMMERCE

THE pattern of commerce in 1954 did not change markedly. It is conducted by a small but increasing number of agency houses, and by many Chinese merchants.

The most important agency houses are the leading European companies. but there are also Chinese firms holding valuable agencies. These houses import from Great Britain, Singapore, or from other countries proprietary articles for which they are the sole distributors. They hold a number of these important agencies as buyers for their own account, but they also undertake the functions of a branch office of their principals (the marketing organisations of the great combines). In addition to the sale of goods they carry on insurance and other business, and purchase and export produce in competition with the Chinese merchants. The agency houses also act as agents and secretaries for the few large rubber estates in Sarawak and carry on other activities which come, more properly, under the heading of "production". Timber working is one such activity.

The Chinese merchants engage in the wholesale and retail distribution of goods and the purchase of local produce. Not all of the firms trading under Chinese names have Chinese members only, but this is generally so. There are a number of Indian merchants trading almost exclusively in textiles.

The trade of Sarawak is still very closely linked with that of Singapore, and comparatively little arrives in the country direct from Great Britain, Australia or other sources, or upon through bills of lading; even goods shipped on through bills normally require transshipment in Singapore. Most of the imports are from bulk supplies held by Singapore merchants, or from the large Singapore distribution depots, and most of the general produce of the country goes to Singapore for sorting, grading, bulking and re-export. There are however shipments of sago and rubber on

through bills to other countries, and most of the territory's exports of oil and timber are shipped to places further away than Malaya, Hong Kong, the United Kingdom and Australia are the principal recipients of the latter commodity.

The import of goods from Great Britain and other distant places is almost entirely in the hands of the few European firms, but the whole trade of the country passes, at one stage or other, through the Chinese merchants, who carry on a "small shop" trade. In the larger towns and bazaars there are shops engaged solely in the sale of goods for cash (or more often on credit—the system in almost universal use throughout the country), but many combine the purchase of rubber and other produce with the sale of sundry goods. Often the small bazaar shop stocks every commodity its customers could possibly need, a system well suited to the practice of "tying" customers to the shop by extensive credit. The effect is that shops side by side offer for sale virtually the same goods. In up-country bazaars the Chinese merchant must provide lodging in his shophouse for his Dayak and other customers: he is their host, their banker, and their universal supplier.

The more important shops in the towns are usually linked with firms in Singapore, which supply their goods and receive their produce. Similarly Sarawak firms have their associates in up-river and coastal bazaars, and supply them with goods. In return they receive rubber, pepper, and jungle produce by sale or barter. The jungle produce is chiefly rattan cane, *damar* and various types of *guttas*, of which *jelutong* is used in the manufacture of chewing gum.

Most of this jungle produce comes from remote districts where the inhabitants themselves provide virtually all their own necessities. The up-river Chinese trader, however, knows how to cater for the whims of the people and stocks valued objects such as large, glazed, urnlike earthenware jars, and brass gongs. Shot-guns and outboard motors are also esteemed, both for their utility and the prestige they bring.

Very little weaving is now done locally, so that imported cloth has become a necessity. Apart from this, in places far from the towns, oils and salt for lighting and cooking are really

needed by the natives except when the local padi harvest fails, or is short. But it is surprising to see how great a variety of goods is normally to be found even in the remotest bazaar: so wide are the ramifications of this "small shop" trade.

Some Chinese firms carry on business in the purchase of pepper and sago flour for export, and these are specialised trades. The Department of Trade and Customs grades pepper and sago for export.

Trade Statistics

Sarawak adopted the Standard International Trade Classification in 1954 and purchased statistical machinery so that up-to-date trade statistics can be prepared shortly after the period to which they relate. Unfortunately, there was difficulty in obtaining office space and it was not possible to instal the machinery until September, 1954. As a result of this delay substantial arrears of work have accumulated and it is unlikely that final trade statistics for 1954 will be ready for publication much before the middle of 1955. The figures given in the remainder of this Chapter are only preliminary figures and are subject to amendment.

External Trade

The value of the external trade of the country for the year 1954 was approximately \$823,500,000 compared with \$819,640,595 in 1953 and \$78,415,599 for 1940.

This is made up as follows:—

	1954 \$	1953 \$
Total Exports	425,984,000	424,728,257
Total Imports	397,517,000	394,912,338
Favourable Trade Balance	<u>\$ 28,467,000</u>	<u>\$ 29,815,919</u>

Trade Balance

The apparent favourable trade balance of \$28,467,000 is only slightly less than that of \$29,815,919 in 1953. These trade balances do not, however, give very clear picture as the trade figures include the value of crude oil piped to the refinery in Sarawak from the adjoining territory of Brunei and subsequently exported from Sarawak. Crude oil from wells in Sarawak (now only a

comparatively small quantity) is also treated at this refinery, and both crude and refined petroleum oil are included in the value of exports.

Disregarding the value of crude oil from Brunei and Sarawak the position is as follows:—

	\$
Exports	132,340,400
Imports	128,595,000
	<hr/>
Surplus	3,745,400
	<hr/>

This compares with an unfavourable trade balance of \$5,287,940 in 1953.

Neither the figure of \$28,467,000 or \$3,745,400 is however a true trade balance because the former takes into account oil won in Brunei and the latter omits oil won in Sarawak. There must be taken into account the value of the oil won in Sarawak and the “invisible export” of the cost of refining, in Sarawak, the oil won in Brunei. It is, however, not possible to value either. Comparison of the 1953 and 1954 figures shows, however, that the position in 1954 was much better than in 1953.

This increase in the favourable trade balance of some \$9 million (excluding oil) is mainly accounted for by an exceptionally large Illipe nut harvest with exports valued at \$12.6 million.

Imports

The declared value of imports for 1954 was approximately \$397,517,000 made up as follows:—

	1954	1953
	\$	\$
Food	46,172,400	43,723,186
Beverages and tobacco	10,387,800	9,317,580
Petroleum, crude and refined	268,922,100	269,296,550
Textiles, wearing apparel, etc.	8,213,400	7,767,793
Chemicals and drugs	8,415,900	6,381,644
Machinery and		
transport equipment	18,612,100	17,372,801
Manufactured goods and		
sundries	36,793,300	37,816,891
	<hr/>	<hr/>
	\$397,517,000	\$394,912,338
	<hr/>	<hr/>

Bazaar trade in 1954 caused some despondency amongst the retail merchants, who have still in their minds the boom conditions of 1951. In fact the pattern appeared to be similar to 1953, though the volume of business is being continuously spread among an increasing number of shops.

The cost of certain basic foodstuffs, rice, flour, sugar, and milk showed substantial reductions. Salt showed a slight increase. The respective declared values were:—

	1954 \$	1953 \$
Rice	416.05 per ton	548.47 per ton
Flour	340.63 per ton	435.83 per ton
Sugar	381.65 per ton	461.21 per ton
Salt	63.04 per ton	54.91 per ton
Milk	1,414.47 per ton	1,524.65 per ton

Exports

The f.o.b. value of exports for 1954 based on the preliminary figures available was approximately \$425,984,000 made up as follows:—

	1954 \$	1953 \$
Petroleum crude and refined	293,643,600	299,580,387
Rubber	31,078,000	31,616,358
Pepper	43,688,400	49,443,086
Sago flour	2,828,600	4,371,384
Copra	1,281,800	1,275,837
Jelutong	3,130,800	2,126,562
Timber, sawn and logs	13,893,200	13,861,976
Illipe nuts	12,631,300	2,141,873
Sundries (including re-exports)	23,808,300	20,310,794
	<u>\$425,984,000</u>	<u>\$424,728,257</u>

Exports of rubber were 23,000 tons in 1954 compared with 23,958 tons in 1953. The average monthly exports were lower at the beginning of the year, as compared with 1953, but increased considerably from September to December when the price showed an upward trend. In 1953, for the first time, the value of other agricultural exports exceeded that of rubber. The position re-

maintained the same in 1954, rubber accounting for 28.5% of Sarawak's agricultural exports. Although by far the largest proportion of the exports in 1954 was, as in previous years shipped with Singapore as the only declared destination, the quantities shipped on through bills of lading to the United Kingdom and to other European countries were maintained.

15,000 tons of pepper were exported in 1954 as compared with 9,000 tons in 1953. Exports of pepper in 1954 were the highest on record from Sarawak. Prices showed a distinct downward trend and the price margin between white pepper and black pepper widened. Lower prices were partly offset by increased exports and the value of exports in 1954 was \$43.7 million compared with \$49.4 million in 1953. The value of white pepper exports increased from \$9.3 million in 1953 to \$9.5 million in 1954. On the other hand the value of black pepper exports fell from \$40 million in 1953 to \$34.2 million in 1954. The tonnage of white and black pepper exports as compared with 1953 is as follows:—

	1954	1953
	tons	tons
White	2,772	1,391
Black	13,670	7,606

If the price margin widens further producers will revert to white pepper production as was the general rule before the war.

Exports of sago flour were considerably less in 1954; only 12,700 tons were exported as compared with 16,000 tons in 1953 and 22,600 tons in 1952. Falling prices, due to increasing competition from maize starch, had an adverse affect on production. A satisfactory standard quality was maintained and efforts are being made to produce a more refined flour:

The Illipe nut harvest was the highest on record. Weather conditions were favourable and the trees bore heavily. Exports totalled just over 16,000 tons as compared with 2,800 tons in 1953. The value of exports in 1954 was \$12.6 million as compared with \$2.1 million in 1953. A local vegetable oil manufacturing company experimented in the extraction of the vegetable tallow and found a ready market for the crude illipe nut butter.

Cargo Tonnage

The total tonnage of cargo discharged and loaded for the year 1954 was as follows:—

		<i>Discharged</i>		<i>Loaded</i>	
		<i>Cargo</i>	<i>Oil in Bulk</i>	<i>Cargo</i>	<i>Oil in Bulk</i>
Kuching	Tons	80,540	1,317	43,710	—
Sibu	„	40,537	412	29,412	—
Sarikei	„	10,611	690	14,361	—
Binatang	„	5,486	—	3,635	—
Tanjong Mani	„	323	—	123,606	—
Miri	„	13,482	—	5,630	4,599,082
Bintulu	„	831	—	9,799	—
Limbang	„	1,795	—	3,341	—
Lawas	„	620	—	5,898	—
Sundar	„	243	—	2,344	—
Total	„	154,468	2,419	241,736	4,599,082

Tanjong Mani, near the mouth of the Rejang River, is the only sheltered port for vessels of more than about 2,000 tons. Originally it was used solely for timber exports, but other cargo is now being handled. Lack of Customs facilities at the port means goods at present being transported there in sealed lighters from customed ports, but it is intended that full facilities will eventually be provided. Eighty-five vessels called at Tanjong Mani in 1954, compared with sixty-seven in 1953 and forty-nine in 1952.

Customs Revenue

The total Customs revenue for 1954 amounted to \$22,179,235 compared as follows:

		<i>as compared with:</i>	
		<i>1953</i>	<i>1940</i>
Export Duties	\$10,216,275	\$10,801,037	\$1,278,254
Import Duties	\$11,962,960	\$11,783,598	\$2,252,028
	<u>\$22,179,235</u>	<u>\$22,584,635</u>	<u>\$3,530,282</u>

Tariffs

There were no alterations to the Customs Tariffs during the year.

Excise

Excise revenue amounted to \$555,020, the principal source being three distilleries. There is no doubt that collections would be greater if it were not for the very considerable amount of illicit liquor being made. With Sarawak's climate ideal for natural fermentation, raw materials abundant and widespread, and travel generally difficult, the task of catching the illicit distiller is not easy.

VI

LAND UTILISATION AND TENURE

ORGANISATION AND STAFF

THE Land and Survey Department is responsible for surveys, the alienation of Crown land, the collection of quit rent, the issue of titles and the registration of dispositions affecting land. The headquarters are at Kuching and divisional offices are located at Kuching, Simanggang, Sibuan and Miri.

The post of Deputy Director was approved in January and the Department was also strengthened by the appointment of a registered valuer and an additional surveyor. A solicitor, a former Registrar-General of Land, New Zealand, was appointed on a short term contract to draft a consolidated land code bill and a land acquisition bill, legislation long overdue.

Two Junior Service Officers acted in Senior Service posts throughout the year and one Junior Service Officer was promoted to the Senior Service as Land Registrar with effect from 1st January 1955.

Recruitment to the Junior Service Establishment was disappointing. Although sixteen junior technical assistants were appointed, there were nine resignations, leaving twenty-six vacancies at the end of the year. There were six appointments among the grade tracers, draftsmen and demarcators where eight vacancies remain, while the recruitment of five new clerical officers left only two vacancies in this branch at the end of the year.

Two Senior Service Officers were granted short periods of study leave. One officer studied land utilisation surveys in Ceylon while the other studied aerial mapping at the Directorate of Colonial Surveys in England.

The tutor surveyor conducted one refresher course for junior prismatic compass demarcators and another for junior theodolite surveyors, but this tuition was restricted by shortage

of accommodation for outstation trainees in Kuching. The tutor surveyor also held courses in elementary surveying and levelling for field assistants of the Department of Agriculture.

POLICY AND LAND UTILISATION

For some time it had been realized that some modification of existing land policy was necessary so that the alienation of Crown land (particularly agricultural land) might follow more closely the lines of planned development. In particular it was evident that the issue of titles to land should not depend almost exclusively on :—

(a) the uncontrolled sporadic felling of virgin jungle by natives, leading to multiple claims to small areas (often only one or two acres) based on customary tenure and,

(b) applications for land by individuals (both natives and non-natives) in any areas where there happened to be vacant land.

In other words it was apparent that the Land and Survey Department should more closely carry out one of its true functions, namely, the proper assessment from all points of view of Crown land at its disposal and the allocation of this to the best advantage, and not let alienation depend almost entirely on private initiative and existing customary rights.

During the year therefore, application was made, and approval obtained for a sum of \$2,500,000 from the Development, Welfare and Reconstruction Fund, to be spent between 1955 and 1960 on carrying out land utilisation surveys and for the purchase of land (either held under customary tenure or under title) so that the sub-division of big blocks of land could be properly planned. This work must inevitably proceed slowly at first but its importance is difficult to exaggerate. Work was carried out during the year as follows :—

(a) In the First Division, operations were completed in a 35 square mile area on the coast between the Sadong and Samarahan Rivers. As most of the land there is held under title, the operation was a useful staff-training exercise. Towards the end of the year, operations were commenced in a 100,000 acre block which stretches from the 13th mile to the 32nd mile Simanggang Road.

(b) Surveys were completed of approximately half of a block of 4,500 acres of swamp padi land along the banks of the River Rimbas, in the Second Division. Here a re-allocation of land surplus to the occupiers' needs will be made.

(c) In the Third Division, maps were prepared of the Bawan-Pidai area of the Kanowit District in an endeavour to find one or more blocks of land suitable for high yielding rubber planting. Similar work is being done in the upper Binatang and upper Sarikei rivers.

Very necessary legislation was enacted during the year in the Land (Classification) Amendment Ordinance which decrees that no customary rights may be created in the future by the felling of virgin jungle within Mixed Zone Land and Native Area Land. This problem of the depletion of our jungle resources needs still further action and it is proposed in the consolidated land code, which is being prepared, to make it unlawful for native customary rights to be established by the felling of jungle in Interior Areas except with the written permission of a District Officer. At present District Officers give orders to this effect but a judgement of the High Court has revealed that there is no legal basis for these orders.

REVIEW OF LAND DISPOSITIONS

Applications

Applications for land during the year amounted to 5,261, comprising 24,930 acres, as against 6,764 applications for 30,938 acres in 1953.

The 1954 applications were as follows:—

<i>Purpose</i>	<i>Acres</i>	<i>Applications</i>
Building	236	422
Rubber	4,580	815
Coconut	1,771	205
Pepper	634	288
Sago	4,904	669
Padi	4,568	1,040
Other agricultural	7,110	1,766
Cattle grazing	915	43
Miscellaneous	212	13
	<hr/>	<hr/>
	24,930	5,261
	<hr/>	<hr/>

Applications for land for planting rubber decreased by 619 as compared with 1953 largely due to the low price of rubber prevailing during the first nine months of 1954.

The price of pepper was also lower in 1954 and applications for land for planting this crop decreased by 439 as compared with 1953. The restrictions on pepper planting were lifted in mid 1954 and it is possible that some of the land applied for under "other agricultural" was used for planting pepper.

Applications for land for planting sago fell by 175 and for padi by 446, while applications for land for building increased by 118.

Applications surveyed or otherwise dealt with

Applications outstanding from 1953	6,323
Applications received in 1954	5,261
Applications dealt with in 1954	7,103

The applications dealt with were disposed of as follows:—

(a) Surveyed	5,210
(b) Land already surveyed	694
(c) Cancelled, withdrawn etc.	1,167
(d) Titles issued without survey	32
	<hr/>
	7,103
	<hr/>

Applications outstanding at the end of the year were 4,481 as against 6,593 at the end of 1953, a decrease of 1,842. It will thus be seen that survey of current applications is well in hand, but it should be realized that there is a backlog of applications for which titles have not yet been issued. This backlog is now mainly due to arrears in checking the charting of final sheets, but it is pleasing to record that the figure which stood at 11,227 in August, 1953, when a report was presented to Government, had been reduced to 9,156 by the end of 1954.

Transactions in alienated land

7,896 instruments were registered during the year as follows:—

Transfers	3,546
Charges	1,280
Releases of charges	937
Sub-leases	75
Surrenders to the Crown	502
Letters of administration	351
Caveats	189
Miscellaneous	533
Powers of attorney	116
Transmissions by Probate Officers in cases of small estates	367

Issue of titles for Crown land

7,482 leases and 497 occupation tickets were issued during the year, making the total number of titles extant at the end of the year 131,625. In addition, 290 temporary occupation licences were issued.

Mutation surveys and inspections

481 mutations of alienated land were dealt with and 848 miscellaneous surveys and inspections were made.

LAND CLASSIFICATION, DEVELOPMENT AND SETTLEMENT

Land Classification

The approximate total areas of gazetted Mixed Zone Land and Native Area Land at the end of 1954 were as follows:—

Mixed Zone Land	4,342 sq. miles
Native Area Land	1,867 sq. miles

In Mixed Zone Land both natives and non-natives may hold titles to land, and in Native Area Land only natives of Sarawak may hold titles.

At the end of the year the approximate areas of land divided according to the five categories defined in the Land (Classification) Ordinance were as follows:—

	<i>Sq. miles</i>
Mixed Zone Land	4,342
Native Area Land	1,867

Reserved Land

(a) Forest Reserves, Protected Forests and Communal Forests	9,976
(b) Other Government Reserves	20
Interior Area Land and Native Customary Land	30,795
	<hr/> 47,000 <hr/>

The Interior Area Land is mostly virgin jungle. The Native Customary Land is generally remote from the main centres of trade and consists mainly of farming land cultivated under the fallow system, over which only general administrative control is exercised.

In the 4th and 5th Divisions, comprehensive schemes of land classification were completed, approximately 134 sq. miles of Mixed Zone Land and 964 sq. miles of Native Area Land being gazetted. This work and the very good progress made on control surveys, computation and charting in the 4th Division, has brought about a considerable reduction in the number of titles pending issue in that Division.

Settlement Operations and Development

The Settlement Officer, First Division, accepted 2,226 claims and issued 2,156 Land Settlement Ordinance leases of Crown land in the area between the Samarahan and Sadong Rivers. Forty-two lots were set aside for Native Communal Reserves, but these will not be gazetted until 1955.

A very promising settlement scheme comprising 1,000 acres was nearly completed at Sungai Beluboh in Luak Bay near Miri. By the end of the year 700 acres of jungle had been felled and burnt and lots taken up by 80 families. Many houses have already been erected and rubber and other crops planted. Reserves for a bazaar and a school etc. are provided. The settlers, who are all Foochows, have spent over \$50,000 in clearing jungle and on the construction of roads and drains. The Public Works Department assisted by laying out these works.

In the Third Division, new padi land at Tg. Sirik, Tg. Balam and Tg. Bruan was surveyed, and an inspection was also made of all the padi land between Rantau Panjang and Sungai Kut.

Perimeter surveys were completed of six sub-lots for the rubber block planting scheme comprising 1,230 acres; and 1,800 acres of the Petian-Petanak block were felled.

In the Second Division a start was made on the lot survey of the 20,000 unsurveyed gardens held under Jubilee Occupation Tickets in the Saribas and Kalaka Districts. By the end of the year 118 miles of controls and 1,696 lots had been surveyed, 520 lots charted on final sheets and 197 leases of Crown land issued to replace the Occupation Tickets.

The surveys for the land required for the Kuching new port development area and access roads leading thereto (amounting to 1.72 miles) were completed, comprising 42 lots of a total area of 55.52 acres. Compensation amounting to \$605,078 was paid out from the Development, Welfare and Reconstruction Fund and all the land has been transferred to the Crown.

The total paid out from Land and Survey votes for compensation for land and cultivation in respect of various Government projects amounted to \$878,283. This is exclusive of amounts paid from the Development, Welfare and Reconstruction Fund.

SURVEYS AND MAPPING

(a) *Cadastral Surveys*

Field work completed during the year in connection with all types of surveys was as follows:—

Country Land

Prismatic compass boundary survey: 3121 miles, 9568 lots @ \$21.82 per lot.

Theodolite control traverses: 724 miles @ \$187.23 per mile:

Town Land

Theodolite survey of lots: 3390 chains, 282 lots @ \$4.23 per chain and \$50.88 per lot.

Theodolite resurveys and queries etc.

3488 chains @ \$2.46 per chain.

Miscellaneous cadastral surveys (prismatic compass) & inspections

3977 lots @ \$18.95 per lot.

Charting on cadastral sheets

Number of theodolite traverses computed 93; charted 86.

New lots charted 9307 lots

Revision charting 2661 lots

Arrears of office work

(a) Theodolite traverses awaiting action:

For computation 54

For charting 110

(b) Lots awaiting charting:

Current 3926 lots

HOUSING AND TOWN PLANNING

Kuching

By the end of 1954 building costs had dropped to the 1949 level after reaching a peak in 1951/1952; the reduced costs were reflected in greater private building enterprise. Shophouses and commercial premises improved greatly in design and structure; the style and design of suburban residential properties remained relatively unchanged, improvements being generally confined to sanitation and drainage. Sixty-three buildings were completed during the year.

The planning for the first Municipal housing project in Kuching was completed in 1954 and work on site clearance was scheduled to start in January 1955. The site is an attractive one on relatively high ground off Ban Hock Road adjacent to the Song Kheng Hai recreation ground with good communication and market facilities.

The project provides for the erection of 532 units in seven-storey, three-storey and terrace houses at an estimated building cost of \$3,450,000. Towards this sum the Central Government has given a grant of \$575,000 and offered the remainder as a loan at 4%. The monthly rent will average \$33.78. Of the total, 414 are one-bedroom units, the remainder being two-bedroom units. Whilst the finish is austere, the standard of dwelling will be incomparably higher than in the slum areas whence most of the tenants will be drawn.

The following properties were purchased for housing schemes or other development purposes:—

- (a) 60.07 acres at Sekama Road costing \$210,245.
- (b) 8.75 acres at Padungan Road costing \$287,595.
- (c) 6.23 acres at Badrudin Road costing \$65,415.
- (d) 5.04 acres at $3\frac{1}{4}$ miles Penrissen Road costing \$18,880.
- (e) 41.09 acres at Matang Road costing \$72,807.

Miri

Some progress was made with the scheme to replan Kampongs Dagang and China by gradually dismantling the crowded and unhealthy buildings and transferring some of the occupants to a planned residential layout, where titles are being issued to them. Building operations on many of the new lots have commenced and thirty-five titles have been issued. Plans for the construction of roads and drains in the old and new areas have been prepared by the Public Works Department. Two-storey Municipal flats will be constructed in the new area.

Limbang

Five blocks of shophouses in the new bazaar were completed. One block still remains to be filled and constructed: five lots in this block were sold in auction at an average price of \$2,500 each.

Lawas

A contoured detail plan was made and a town plan for a new bazaar, further inland than the present one, was prepared for consideration.

Berkenau

A Malay kampong residential area of seventy-five lots was laid out adjacent to the town.

Sibu

Very satisfactory progress was made with the slum clearance scheme which provides for the removal and resettlement of Kampong Pulau, a large part of which was in a deplorable state. At the end of the year, fourteen houses in the old kampong had been demolished; and, in the resettlement area, nine new houses

had been completed and a further twenty-six were under construction. Tenders have been called for the construction of roads. Expenditure during the year on this scheme was \$407,631, paid from the Development, Welfare and Reconstruction Fund.

A vacant plot of 6,005 square feet in the bazaar was sold in auction to the Chartered Bank of India, Australia and China at the record price of \$24.31 per square foot.

Thirteen new shophouses were constructed.

Binatang

Fourteen new three-storey shops were built and also a new cinema.

Daro

A new layout of twenty residential lots was surveyed with the intention of clearing up a squalid squatter area.

Simanggang

The building of shops in the new bazaar proceeded very slowly: at the end of the year only six had been completed. The river bank has been cleared by the demolishing of the old shops there. Ten shoplots were auctioned but only four were sold, the average price being \$2,672 each.

Buso

The old bazaar was burnt down on the night of 25th September. A new bazaar layout has been made.

Lundu

Rehabilitation loans for the re-building of two shophouses were granted and twenty-nine charges registered.

Small bazaars

Eight new shops were constructed at Paloh and all the old dilapidated ones were demolished. At Narub, six shoplots and four industrial lots were surveyed. A small bazaar layout was surveyed at Tondong and another at Musi in Bau District.

(b) *Topographical Surveys*

Topographical field work carried out during the year was:—

Compass traverse: 58 miles @ \$80 per mile.

Levelling: 36 miles @ \$80 per mile.

Ground control for air photo mapping including 9 astronomical fixes:

The Royal Air Force started air photography at the end of April and continued till the end of July, when bad weather forced them to discontinue their efforts. Four sets of 50 sorties were received, totalling 27,800 prints. The photography was mainly re-photography of areas previously covered by cloud and large scale town cover of Kuching, Sibü, Kanowit and Kapit was obtained. There still remains an area of approximately 10,000 square miles to be flown, mainly in the upper Baleh, upper Balui and upper Baram rivers.

(c) *Topographical Mapping*

The 1/500,000 printed maps of Sarawak and Brunei (in 2 sheets) were published and distributed.

Sixty-one new air photo mosaics on scales of 1/25,000 and 1/35,000 were compiled and distributed: the area covered being 6,720 square miles. The total area covered by mosaics is now 31,000 square miles. In addition, 40 new air photo mosaics on a large scale (1/4,800) were prepared covering the main towns of Sarawak and Brunei.

Fourteen bromide proof sheets of the Directorate of Colonial Surveys 1/50,000 preliminary maps in the Santubong-Lingga area were returned to the Directorate.

Steady progress was made with the 2 mile series maps. Six preliminary sheets were finished and distributed and three were partly completed. Fair drawings, based on slotted template lay-downs, will commence in 1955.

MINING

In the Bau area, thirteen gold mining leases, covering an area of 1,790 acres, were cancelled on expiration of their terms and not renewed. At the end of the year twelve gold mining leases covering 2,149 acres were still extant. The future of the Bau gold mining industry is very uncertain.

Four general prospecting licences were issued and four panning licences. No exclusive prospecting licences were issued.

There have been enquiries from outside Sarawak concerning the possibility of exploiting the Silantek-Abok coal seams in the Second Division.



Hedda Morrison

Malay girls selling fish at Kabong

VII

PRODUCTION

AGRICULTURAL — GENERAL

ABOUT 5,600 square miles of the flat deltaic and coastal regions are deep peat swamps at or near sea level. This land is unsuitable as it stands for agricultural purposes and it would probably be impracticable and uneconomic to reclaim much of it for wet padi cultivation; however, there are considerable areas of moderately productive wet padi land estimated at a total of not more than 2,000 square miles mainly situated on the river banks on the deltas.

The interior is largely steep hills and mountains. Flat land is occasionally found between the hills and the existence of some plateaus has been confirmed but the total extent of flat land in the interior is comparatively small and it is generally difficult of access from the coastal areas. There are some outcrops of basic and intermediate igneous rocks and limestones, and, where they are found, there is usually a marked local improvement in the quality of the alluvial soils associated with them; unfortunately the extent of the good soils is comparatively small.

The average annual rainfall is about 160 inches; in the south-west there is a definite period of maximum rainfall during the months of December, January and February. In the north-east the maxima and minima are not so pronounced and the distribution of rainfall is more uniform. Very heavy local storms account for a great deal of the rainfall and these storms sometimes cause disastrous and unexpected floods which may well be one of the main reasons for the limited development of agriculture in the past; unfortunately the limited areas of good alluvial soil are all too often particularly subject to serious flooding. Heavy rainfall is often succeeded by short dry hot periods and vegetation on the thin poor soils then quickly gives the impression of a prolonged drought. Shade temperatures average 80°F and daily minima below 70°F or maxima above 90°F

are seldom recorded. Atmospheric humidity is generally high, but, particularly in dry spells, there is a marked drop in relative humidity in the early afternoon. Sunshine records show that the average daily period of bright sunshine is not more than five hours.

Pest damage to crops can be extremely serious. Observations suggest that insect pests may be more serious than fungoid pests, though it is possible that as cultivation grows more intensive, fungoid pests may become a greater menace. Small animals, particularly rats and squirrels, are a major pest, and wild pigs, monkeys and deer can also do considerable damage. Giant snails are also becoming a pest of increasing importance. Small birds do much damage to standing padi crops and are becoming increasingly troublesome on all grain crops.

Agricultural policy in the past has been to base development on the encouragement of the small native farmer working a mixed system of farming rather than on encouragement of large specialised plantations worked by daily paid labour. Except for five large rubber estates, small farms are indeed the basis of the country's agriculture but it is rare to find family farms or smallholdings in the usually accepted sense of the term and methods of working and financing the small farms are complex and variable. Daily paid local labour is often employed by the owner of even small rubber and pepper gardens and various forms of share cropping are common. Frequently Dayak owners of small rubber gardens do not work the gardens themselves but the highest Chinese bidder is allowed to do so. The owners of small rubber and pepper gardens are sometimes financed by local shopkeepers to such an extent that the shopkeeper has virtually become the owner and the original owner a paid workman on some system of share cropping. As far as subsistence padi farming is concerned (both on the hills and in the swamps), the individual generally does work to some extent independently though there is usually a tendency for communities to farm together as such when it is obviously to their advantage to do so.

A limited number of development centres have been established by the department throughout the country and these centres demonstrate what can be achieved by stabilised intensive

methods of farming instead of the extensive methods that are all too common. The centres are the focal points of the department's work; living accommodation is available at some of them for visiting farmers and is being extended; it is hoped that eventually, when the staff situation improves, it will be possible to establish farm schools at the centres.

The overall staff situation in the Department has again deteriorated although recruitment to the lower grades improved. Scholarships for the training of Sarawak men as Agricultural Officers at recognised centres abroad are now available and some interest is being shown in them by educated young men; it will be some years, however, before there can be any appreciable addition to the staff of Agricultural Officers and Assistant Agricultural Officers from local recruitment. The difficult overall staff situation is of course aggravated by the generally primitive state of the country's communications. Unless the situation improves in the near future some curtailment of the Department's work is inevitable.

CROPS

Padi

Rice is Sarawak's staple foodstuff and padi is the main crop. The export of rice or padi is not permitted. From the technical point of view Sarawak could be self supporting in rice. When prices for the main export products are low and there is little money available in the rural areas for buying imported rice, the country does approach self-sufficiency. When prices of export products are high interest in padi planting (particularly wet padi) wanes and the country may become dependent on imports for as much as half its rice.

Imports of rice since the war have been:—

1947	—	19,272	metric tons
1948	—	17,525	metric tons
1949	—	11,517	metric tons
1950	—	25,478	metric tons
1951	—	31,907	metric tons
1952	—	28,723	metric tons
1953	—	25,878	metric tons
1954	—	23,477	metric tons

To encourage local production Government has operated a padi purchasing scheme since 1946 and has guaranteed a minimum buying price to Sarawak farmers. Recently the guaranteed price has at times been higher than the open market price but Government has decided to maintain the guarantee at its present level for the time being.

Dry padi cultivated on the hills under a system of bush fallow farming accounts for much of the padi produced. When adequate bush fallows are maintained the system is not an unsound way of using Sarawak's poor hill land for food production where the use of fertilisers is not practicable; when abused, however, it leads to serious problems regarding the conservation of natural resources. Authority to control and rationalise the practice is available under the Natural Resources Ordinance 1950 and is being applied where the people concerned realise the need for control. Because of the scattered, patchy nature of the cultivation, the primitive state of the country's communications and the shortage of staff available to do such work, no accurate statistics about the crop are available, but it is estimated that on the average about 500,000 acres of jungle and scrub are cleared each year for the purpose. Under favourable conditions surprisingly good yields of excellent quality padi are obtainable under this method but there are often poor crops and even complete failures. Over a period of years it is estimated that yields of hill dry padi over the whole country do not exceed 100 gantangs (gallons) per acre.

Wet padi is cultivated mainly in the deltas and coastal areas. The methods used vary from true swamp padi cultivation to cultivation of semi-wet padi on the river bank levees; stabilised intensive wet padi cultivation on the basis of efficient water control is not common. Yields are generally low and probably do not average more than 200 gantangs per acre. The acreage of wet padi varies considerably from year to year but the maximum planted each year is about 200,000 acres.

There is considerable scope for increased production of wet padi particularly by use of improved water control. Much can be done to conserve rain falling on the fields by simple methods of drainage control but some irrigation water is generally necessary

for the best results. Some success has been obtained with small diesel operated centrifugal irrigation pumps but the large areas that must be developed cannot be developed on this basis and a general need for major water control works is becoming apparent. The design and construction of such works presents unusual difficulties in Sarawak (particularly as far as flood control is concerned) and is beyond the capacity of the existing staff; with financial assistance from the United Kingdom Government a firm of consulting engineers has therefore been engaged to investigate some of the most promising areas.

Work on Sarawak's wet padi fields is exceptionally exhausting owing to the climatic conditions and it will be no use developing new wet padi production areas if they are going to be beyond the working capacity of Sarawak's farmers. The use of modern machinery is an obvious way of meeting the difficulty but unfortunately conventional types of machinery cannot deal with the difficult conditions encountered on the type of swamp that forms much of Sarawak's most productive wet padi land. Considerable importance is therefore attached to the experiments based on cable traction that are being conducted by the Brunei Government on the recommendation of the Sarawak Department of Agriculture. The experiments have been entrusted to the same firm of consulting engineers who are conducting the Sarawak wet padi land surveys.

Considerable progress has recently been made on the control of some of the worst pests of the padi crop in Sarawak; more especially on the basis of zinc phosphide baits for rat control and BHC ("Agroicide" particularly) sprays and baits against insects. Increasing quantities of these pesticides are being sold to farmers.

The 1953/1954 padi crop was generally good and exceptionally high yields of both wet and dry padi were obtained in some places. The weather during the middle of 1954 was unusually wet and this seriously interfered with the burns and preparation of the land for padi planting generally; pest damage and weed infestation have been severe and the prospects for the 1954/1955 crop cannot be regarded as favourable, although at the end of 1954 the outlook was rather better than was at one time feared.

Rubber

Rubber is the chief tree crop and smoked sheet rubber the most important agricultural export. Most of the rubber trees are old seedling rubber in very poor condition and must be regarded as a wasting asset. Management, tapping and sheet manufacture are generally of a very low standard.

Prices fluctuated somewhat during the year but there was a steady upward trend and at the end of the year the more efficient gardeners were making useful profits. There was a further slight decline in the total rubber exports for the year as the following figures show:—

Rubber Exports (to the nearest ton)

1951 —	42,251
1952 —	31,461
1953 —	23,958
1954 —	22,966

An encouraging sign is that production in December was easily the highest monthly total during the whole of 1954.

The proportion of the various grades in Sarawak exports showed little improvement and the latest estimate is as follows:—

<i>Grade</i>	<i>Proportion</i>
RSS No. 1	5%
RSS No. 2	20%
RSS No. 3	55%
RSS No. 4	10%
RSS No. 5	10%

These figures are in striking contrast to the results obtained at the small demonstration factory of the Department of Agriculture at Kuap whose total production in 1954 of 103 piculs finished sheets was all accepted by the local trade as RSS No. 1; they are also in striking contrast to the results obtained in 1954 on the Sarawak Rubber Fund Committee's Samarahan Estate where the approximate proportions in each grade in a total production of 2,850 piculs was:—

<i>Grade</i>	<i>Proportion</i>
RSS No. 1	74%
RSS No. 2	9%
RSS No. 5 (i.e. scrap, cuttings etc.)	17%

Development proceeds satisfactorily on this 4,000 acre formerly Japanese owned Estate near Kuching which was acquired by the Sarawak Rubber Fund Committee in July 1953; the estate is managed for the Committee by the Sarawak Rubber Estates Ltd. in close co-operation with the Department of Agriculture. The estate made a substantial profit in 1954. The rebuilding programme is practically complete and the staff and labour housing are now of a satisfactory standard; the factory can be regarded as an excellent demonstration of a modern smoked sheet factory. Modern machinery has been of great assistance in establishing a large budded stump nursery and it is hoped that at least half a million Tj.1 and PB.86 stumps will be available in 1955 both for replanting on the estate and for supply to Sarawak rubber gardeners. Amenities for the staff and labour have received attention and an improved dispensary, elementary school and shop are now available and the mosque is being rebuilt. There is a small permanent labour force but the estate depends to a considerable extent on seasonal labour from surrounding Malay villages; during padi planting and harvest the people remain on their own land and at other times work on the estate. Such a system makes operation of the estate difficult at times but on the credit side it does mean that the project has become a successful community development project of outstanding interest which, at present rubber prices, is not merely self-supporting but profit making.

A small training school for training both Department of Agriculture field staff and independent rubber gardeners in modern production techniques has recently been started at Samarahan Estate and put in charge of an experienced instructor of the Department of Agriculture.

It is most urgently necessary to get increased acreages under high yielding rubber in Sarawak either by replanting or new planting; increased public interest is fortunately now being shown in the matter. Recently the Government authorised major expenditure on replanting subsidies but details of the methods of utilising the funds that have become available for this work are not yet settled.

Sago

There are about 150,000 acres under sago cultivation, chiefly in the Mukah, Oya and Dalat regions of the Third Division but

also including large areas in parts of the Second Division. Detailed information about the number, age, and condition is not available, but including land under fallow and occupied by young immature palms, it is estimated that about 75,000 acres are under productive sago. Yield per acre is not high and the methods of extracting the flour are sometimes primitive and the quality of the product poor.

The exports of sago flour showed a further decrease in 1954 and totalled only 12,694 tons (as against 22,620 tons in 1952 and 16,073 tons in 1953). This decrease was probably partly due to a lack of mature palms caused by heavy overcutting when prices were high but is also due to a considerable extent to the low prices that have ruled for the product during the year; thus in December the average price in Kuching for F.A.Q. (fair average quality) flour was only \$8.50 per picul.

At one time some anxiety was expressed as to whether regeneration and planting were taking place at a sufficient rate to balance the rate of working of the palms; further information has now become available, however, which suggests that the position is much better than was at one time feared.

Since the passing of the Sago Flour (Control of Exports) Ordinance 1948 the export of flour that does not reach a specified minimum standard of quality has been prohibited. The scheme has worked reasonably well but difficulties have arisen from time to time largely due to uncertainty about the standard. It is not at present easy to define the standard in easily recognisable practical terms but the difficulties have now been overcome to some extent by closer liaison with the trade through an enlarged advisory committee.

Technical investigations on processing and marketing continued during the year in co-operation with the Imperial Institute and the Sarawak and home trade. It seems clear that good quality Sarawak sago flour possesses valuable properties for certain industrial purposes that are not possessed by other starches; it can be produced very cheaply and provided simple precautions are observed in its processing, transport and storage, it could probably continue to compete successfully in the world starch markets. Recent work suggests that machinery for processing need

not be elaborate or expensive. There are complicated social and economic difficulties to be solved before substantial development of the industry can take place on more highly mechanised lines.

Pepper

This was an important export product for many years before the war. Quality was excellent and the best grade commanded the highest prices offered in the world markets. During the Japanese occupation practically all the gardens were abandoned but there has been a remarkable recovery in the industry and production now far exceeds pre-war levels. Before the war most of the vines were planted in small gardens, often of less than half an acre, but recently there has been a tendency to amalgamate into larger units. The industry is still mainly in Chinese hands but Dayaks are showing interest in the crop.

The total exports of pepper (both black and white) in 1953 were a record of 8,997 tons but this record was again broken in 1954 with a total of 15,022 tons. Prices maintained a higher level than was generally expected and at the end of December were still \$168/- per picul for white and \$105/- per picul for black. Before the war Sarawak had produced mainly white pepper because it was a more valuable product than black. Since the war the margin between the prices offered for the two types has tended to close; this has been reflected in the increasing proportion of black pepper produced and in 1953 approximately 85% of the exports were black pepper.

Whilst the rush to plant pepper has abated considerably since prices dropped, some planting is still taking place and some young gardens will be coming into production for the first time in 1955. Weather conditions have not favoured flowering and fruit setting in 1954; in addition serious disease is taking its toll of the mature gardens. The general impression is that the production in 1955 will be still higher than in 1954 but that the increase from 1954 to 1955 will not be nearly so large as the increase from 1953 to 1954.

“Sudden death” disease continues to cause serious damage. The potential danger from this disease was first recognised late in 1952; it stills remains unidentified though some indications

have been obtained of factors that may lead to its sudden development in a garden. Funds have been made available for a research scheme to investigate the matter further and it is hoped that two plant pathologists will continue work in Sarawak in 1955.

Soil erosion is frequently a serious problem under the clean weeded conditions of the majority of the pepper gardens. No further action to force unco-operative gardeners to adopt suitable control measures was taken during 1954 as the legal position under the Natural Resources Ordinance had not yet been clarified.

Coconuts

This is mainly a small-holder's crop and is largely confined to the First Division. The total acreage is estimated at only 21,000 acres and many of the palms are old and in very poor condition. Some copra is exported but the quality is usually very low. The Department is demonstrating simple methods of production of good quality copra.

Maize

This crop is grown to some extent on the more fertile land but is usually planted in occasional patches among the padi crops.

Jobs Tears, Ragi, Italian Millet and Sorghum

These are grown to a small extent but are usually only regarded as substitutes for padi in time of emergency and as poultry food. A single ear selection of sorghum made from a recent importation of seed by the Department of Agriculture shows considerable promise.

Sweet Potatoes, Tapioca and Yams

All are grown throughout the country for use as everyday vegetables and substitutes for rice in times of shortage.

Fruit Trees

Fruit trees are found in the villages but the demand for fruit far exceeds the supply and there is considerable scope for planting further trees such as durian, rambutan and mangosteen.

Fresh Vegetables

Production, except by some Chinese market gardens near the towns is on a small scale. A fair variety of tropical vegetables can be grown though the exceptionally heavy rainfall at times hinders intensive cultivation. The production of some temperate-climate vegetables is possible in parts of the uplands.

Pineapples

This fruit will grow on most types of soil in Sarawak and fruit of high quality and exceptional flavour can be produced on the drained peat soils.

Coffee

Coffee is cultivated to a small extent near the villages for local consumption. Recently, increased interest has been taken in planting coffee, and large numbers of seedlings have been distributed by the Department from the main nurseries. Steps are being taken to increase the supplies of seedlings available in out-station nurseries.

Tobacco

Tobacco for local consumption is planted in small areas near the villages. The quality of the product can probably be improved.

Cocoa

This crop is not yet cultivated by farmers in Sarawak but some observation plots established by the Department of Agriculture show some promise on the better types of soil, particularly when fertilisers are used. Five hundred seedlings raised in quarantine in Malaya from clean selected seed obtained from the Gold Coast have been planted in the First Division and are now in full bearing. Seedlings raised from the pods are being distributed throughout the country for planting on suitable sites but so far farmers have not shown much interest.

LIVESTOCK HUSBANDRY

Apart from poultry and goats which are widely kept on a small scale throughout the territory, livestock husbandry does not as yet form a major part of the agricultural economy of Sarawak except in Fifth Division where quite large numbers of buffaloes

are kept. In that Division, the export of buffaloes for meat to Brunei (particularly Seria) is quite an important trade although exports fell in 1954 due to re-opening of the export trade from British North Borneo. Buffaloes are commonly used for the cultivation of wet padi land by trampling and this simple method is surprisingly effective. So far, little interest has been shewn in the use of buffalo drawn implements and from past experience it seems likely that their successful application may be limited to the shallower and more easily worked swamps where draught is light. However on the Departmental demonstration plot at Danau, Fifth Division (now being managed under Departmental supervision by the local school) a trial of simple implements imported from British North Borneo appears to have been successful and this work will be extended where practicable. Buffaloes at Departmental development centres in the First Division continue to thrive and apart from the very real risks of severe losses during the disastrous floods that are often experienced, it seems clear that they could be kept in many parts of the division for meat if not for cultivation.

The cattle population of Sarawak is small although there are a number of good herds along the sea coast and along certain of the rivers where severe flooding is not the rule. In order to improve some of these herds the Department imported during the year a few cross bred Sindhi x Kelantan bulls from Malaya for its own herd and for re-sale to farmers. A further importation of Red Sindhi cattle from Pakistan was arranged during the year. The Deputy Director of Agriculture called at Karachi to select these on his return from leave, but delivery was delayed due to difficult over export formalities, and the animals had not arrived at the end of 1954. Towards the end of the year the existing small herd of Kelantan and Red Sindhi cattle at Tarat were seriously affected by a major outbreak of tick fever (Theilariasis) which proved difficult to eradicate.

The Hereford bull mentioned in last year's report has not been really successful; he kept in reasonable condition most of the year but has still not produced any calves and it seems doubtful if there is any prospect of this breed being used successfully for crossing in Sarawak. The most successful importation has undoubtedly been the balinese cattle (*Bos banteng*) which continue

to thrive under the roughest conditions and, provided they are carefully handled, seem to be more tractable than had been expected. Both the Balinese cattle and the Sindhi x Kelantan cross will probably eventually find a place in Sarawak's rural economy. Milk cattle continue to be confined to urban areas and milk production, which is very small, is in the hands of Indian cattle keepers.

Pigs are still imported into Sarawak in large numbers and, during the year, plans were made for development of the pig keeping industry with a view to making Sarawak more nearly self supporting. Partly to implement these plans a further five pairs of Middle White pigs were ordered from the United Kingdom. The greatest difficulty was experienced in obtaining animals unrelated to previous importations as this breed is fast declining in popularity in England. The pigs were shipped late in the year and were expected to arrive early in 1955.* Production of pigs in Sarawak is largely in the hands of Chinese small holders, rather smaller numbers being produced by Dayaks in longhouses, usually under unsatisfactory conditions. Feeding is still largely inadequate for sound economic production especially in up river areas where pigs are often scavengers.

Domestic poultry do fairly well in most parts of the country now that the ravages of Ranikhet (Newcastle disease) are gradually being controlled by increased use of vaccine. Due to staff difficulties the treatment has mainly to be confined to urban districts and to the main centres of population. In the Kuching area a few poultry keepers operate on a large scale and supply eggs and table birds for local consumption.

The Veterinary Officer appointed in 1953 has been able to commence a survey of the livestock population and disease problems of the territory and has also assisted with the training of Agricultural Assistants in the Department's Staff Training School, Kuching. He is gradually building up an organisation in the Kuching area and has prepared plans for a veterinary clinic to be erected in the near future.

There were three outbreaks of Haemorrhagic Septicaemia during the year; all were controlled by early diagnosis and further losses prevented by the prophylactic use of serum and vaccine.

* arrived and quarantined at Limbang January, 1955.

FISHERIES

Fish is a staple food for many people and both marine and freshwater fisheries are important. The main source of supply is the shallow coastal waters and the estuaries of the larger rivers, worked mainly by Malays, Melanau and Chinese (Henghua) fishermen.

The fishing methods along the coasts may appear crude to the casual observer but anyone acquainted with sea fishing is soon impressed by the simplicity, ingenuity and suitability for local conditions of the contrivances. The fishermen show much skill and good seamanship.

The Fisheries section of the Department had a successful year, 545.35 piculs of fish being landed from 42 trips despite the fact that the M.F.V. "Saripah" was under repairs on two occasions. Results tended to confirm the general impression given by last year's work, i.e. that satisfactory catches can be obtained in relatively calm weather with the Danish seine net and that "landas" season fishing can best be carried on by the use of large wire "bubu" traps. During the year, after discussions with the Director of Fisheries, Malaya, a more precise system of recording the location of catches was introduced and, when this has been in operation for a full year, preliminary analysis of the data will be made with a view to mapping the local fishing grounds more accurately. Although the Danish seine nets after slight modification, worked really well, the purse seine net was not successful; the purse seine gear available was of poor quality and it seems that in suitable conditions for "shoaling" the fish readily detect the presence of the net and so escape. It was not possible to try out inshore fishing traps to any extent as the Department has no suitable small boat at present. Shark lines never gave much fish and it seems clear that the best results in southern Sarawak waters can be obtained by a combination of Danish seine and "bubu" traps; the latter being especially valuable as they catch mainly first and second grade fish and at a time when fish in general is scarce.

A successful small fish meal production unit was started during the year, using simple apparatus, to deal with surplus low grade fish from the Danish seine catches. The process in-



Hedda Morrison

Heng Hua fisherman.



Dr. D. H. Nibble

Sea Dayak Girl husking padi at Rumah Ngindang, Sungei Julau.

volves steaming under slight pressure in a Bareford pig food cooker, pressing in a home made sectional press and drying in the sun or artificially. As sun drying on its own is not particularly reliable in the climate of Sarawak, a simple and economical method of artificial drying has been introduced based on a mobile drying floor mounted on bogie wheels and running into a shed at night or during rain. This improved the process but did not completely answer the problem of drying on sunless humid days and a small electric powered hot air drier was therefore added which has given excellent results. After thorough drying the material is milled to a fine flour in an electrically driven hammer mill the resulting fish meal being of a very satisfactory standard for animal feeding. The use of this simple process has enabled surplus fish to be disposed of profitably in times of glut but toward the end of the year small scale trials were also made with simple ice chest storage of fresh fish for human consumption. Preliminary results are most satisfactory and it seems probable that a more even supply of fish at more uniform prices could be assured if fish dealers can be persuaded to install the relatively cheap equipment involved.

Chinese farmers obtain large and profitable yields from freshwater fish farming mainly with carp and often combined with piggeries. Except for the common carp which breeds but tends to deteriorate in size, farming requires the importation of fry and so is not suited to inaccessible areas or for farmers whose capital is limited. Further work with *Tilapia mossambica* has been done and the spreading of this species is now a part of the Department's policy.

FORESTRY

Natural forest still covers some 34,000 square miles or approximately 72% of the total land area of Sarawak. Except for a relatively small and commercially unimportant area of moss forest on the tops of the higher hills, virtually the whole of this natural vegetation is classed as lowland tropical rain forest. It consists almost entirely of evergreen trees and is in most parts dominated by species of one botanical family, the *Dipterocarpaceae*, but it is nevertheless very varied; it is estimated that the number of indigenous tree species, many of

which are still unknown, exceeds 2,500, but not more than about one-tenth of them are important as timber-producers. For the working of timber, much of the forest is still inaccessible but, if the internal communications of the country can be improved, most of it is potentially productive.

The lowland tropical rain forest is divided into a number of distinctive types, depending mainly on soil. The principal types are described below:—

Mangrove swamps

These are tidal swamps situated in sheltered places in the estuaries of the larger rivers, the most important being the Sarawak, Rejang and Trusan. The total area is estimated at about 460 square miles, but only about half of this is true mangrove of good quality, the remainder being poor forest in the drier parts of the swamps, or else carrying thickets of the *nipah* palm. Mangrove is of little importance as a timber producer, but a valuable source of firewood, charcoal and cutch. The *nipah* palm provides sugar and thatch.

Peat-swamp forest

The greater part of the coastal belt is swampy land with a deep peat soil, extending inland for more than 50 miles in places and covering about 6,000 square miles. About 5,770 square miles of this is still forest, often of a very valuable type which, because of its accessibility and the quality of some of its timbers such as *ramin* (*Gonystylus bancanus*), now forms the chief source of Sarawak's timber supplies. Various distinct sub-types of swamp forest occur. Of these the most important is mixed swamp forest, in which *ramin* is often the most abundant large tree. Another very distinctive sub-type is *alan* forest, in which *Shorea albida* often occurs in almost pure stands.

“Kerangas” or “Heath forest”

This type of vegetation occurs on areas of very poor, acid podsol soils, scattered throughout the country and probably covering several thousand square miles. Much of this forest is of poor quality and even in the better parts the trees are usually of relatively small size, but nevertheless the forests are often of considerable value. In places there are almost pure stands of *ru ronang* (*Casuarina sumatrana*) which provides high quality fuel, and there are also rich stands of the conifers *bindang* (*Agathis*

alba) and *sempilor* (*Dacrydium elatum*), which are not otherwise available except on steep and usually inaccessible hills. Where shifting cultivation is widespread, the only forests left are mostly of the *kerangas* type, the soil being too poor for agriculture, and these are invaluable as the only remaining local sources of timber, firewood and other essential forest products for the surrounding population.

Riparian Forest

Rather narrow strips of riverine alluvial soils, rarely half a mile in width, carry a special type of forest which appears to vary mainly in accordance with the nature and the speed of the rivers. In the upper reaches of fast flowing streams, the riparian forest often consists chiefly of various species of *engkabang* (*Shorea* spp.), which are the source of the valuable, oil-bearing illipe nut. Where the streams change to comparatively slow-flowing rivers, however, the forest often changes too, and in many places *belian* (*Eusideroxylon zwageri*) becomes the most important tree. The remaining valuable riparian forest is of small extent; much of it has been destroyed by ribbon cultivation along the rivers, and also because of the esteem in which the timber of *belian* has always been held.

Other types

The remaining forest, covering about 25,000 square miles, is found on various less specialised soils. It is very mixed, containing a multitude of species, dominated, however, by Dipterocarps such as *meranti* (*Shorea*), *keruing* (*Dipterocarpus*) and *kapur* (*Dryobalanops*). It is very dense and the trees attain a fairly large size, the roof of the forest being usually about 150 feet above the ground. Below this canopy formed by the larger species, there are several not very sharply defined layers of smaller, shade-bearing trees, but low vegetation is generally scanty because very little light reaches the ground. Climbing lianes and canes are common, and epiphytes such as orchids are abundant on the higher branches of the trees. Considerable areas of this forest are obviously secondary, the relicts of a former cultivation that has now disappeared.

Forest law and policy

A new Forest Ordinance, and new Forest Rules, passed in 1953, came into force at the beginning of the year. The Government also declared its forest policy, the general statement of

which is as follows:

It is the policy of the Government of Sarawak:—

(1) To reserve permanently for the benefit of the present and future inhabitants of the country forest land sufficient

(a) for the assurance of the sound climatic and physical condition of the country; the safe-guarding of soil fertility, and of supplies of water for domestic and industrial use; irrigation and general agricultural purposes; and the prevention of damage by flooding and erosion to rivers and to agricultural land;

(b) for the supply in perpetuity and at moderate prices of all forms of forest produce that can be economically produced within the country, and that are required by the people for agricultural, domestic and industrial purposes under a fully developed rational economy.

(2) To manage the productive forests of the permanent forest estate with the object of obtaining the highest possible revenue compatible with the principle of sustained yield and with the primary objects set out above.

(3) To promote, as far as may be practicable, the thorough and economical utilisation of forest products on land not included in the permanent forest estate, prior to the alienation of such land.

(4) To foster, as far as may be compatible with the prior claims of local demands, a profitable export trade in forest produce.

Forest Department organisation

At the end of 1954 the Forest Department comprised 142 officers of all ranks. The administration is organised on a territorial basis, with an Assistant Conservator or Assistant Forest Officer, directly responsible to the Conservator, in charge of each of five Sections. The First and Second Administrative Divisions form one forest Section; the Fourth Administrative Division is divided into two, Miri and Bintulu; and the Assistant Conservator in charge of the Fifth Administrative Division is also State Forest Officer, Brunei. One Assistant Conservator devotes his whole time to research and the training of field staff.

Exploration

The principal exploration work now in progress aims mainly at the location of forest rich in *belian*, and at a preliminary survey of the various types of swamp forest. Further examination of the country between the Niah and Suai rivers, mentioned in last year's report, confirmed the presence of very good forest along the watershed, with *belian* scattered throughout and occurring in heavy stands in the valleys. In other parts of the country, however, results were again disappointing, and it seems unlikely that any more large areas of *belian* forest remain to be discovered.

A survey of the swamp forests between the Batang Lupar and the Rejang, in the Second Division, covering 560 square miles, was completed, and revealed the presence of one of the richest *ramin* forests so far discovered, along the right bank of the lower Saribas. Exploration of swamp forests also continued along the lower Baram.

Exploration of the remaining forests in the First and Second Divisions was made in the hills from Balai Ringin to Silantek, on the Gunong Pueh range, and in the area immediately to the north of the Samunsam river. There is little inland forest left in these divisions except on extremely poor soils, but some of the steeper country along the Indonesian border carries good stands.

Constitution of Permanent Forests

The constitution of the Colony's permanent forest estate again made satisfactory progress, and the settlement of 348.5 square miles was completed during the year, with another 432.6 square miles under preliminary notification. The total area of permanent forests is now 9,591.5 square miles, or approximately 20.4% of the land area of Sarawak.

Forest inventories

The soils of Sarawak are so varied and often so poor, that proper management of the permanent forests on a basis of sustained yield is impossible unless stock-maps can be provided. The method generally used is to make a preliminary map from aerial photographs, and check the interpretation and assess the quality by random samples on the ground. The total area covered by such surveys during the year was 242.3 square miles, bringing the total of all areas covered to 1511.7 square miles. Close co-operation was maintained with the Photo-Forestry Section of the Directorate of Colonial Surveys, who provided preliminary maps of a large area, covering all the important swamp forests of the Rejang delta.

Working plans

A plan of management for the mangrove forests of the Fifth Division, covering 14.0 square miles of Forest Reserves, was prepared during the year. The plan, which depends mainly on the export of firewood and poles to Hongkong, provides for a minimum felling girth system. The total area of permanent forests now governed by working plans is 624.3 square miles, of which 558.9 square miles are timber working circles and the remainder fuel working circles.

Forest industries

At the end of the year there were 56 licensed sawmills working in the country. The total cut of commercial wood, in terms of round timber, was 292,974 tons of 50 Hoppus feet, as compared with 289,640 tons in 1953. Of this total, approximately 70% was exported, and timber exports were valued at \$13,891,980 f.o.b. as compared with \$13,861,976 in 1953.

TIMBER EXPORTS 1954

Destination	Sawn timber Tons of 50 cu. ft.	Round timber Tons of 50 Hoppus feet	Total equivalent in round timber Tons of 50 Hoppus feet	
			1954	1953
United Kingdom	43,827	8,410	96,064	108,893
Hongkong	3,312	48,300	54,925	50,225
Australia	11,355	8,224	30,934	20,139
Borneo ports	8,412	465	17,290	19,264
Singapore	572	385	1,529	2,017
South Africa	101	39	241	1,923
Japan	—	781	781	897
Egypt	370	—	740	334
Germany	551	3,880	4,982	136
Netherlands	283	2,321	2,887	133
Italy	28	309	365	115
Belgium	1,092	1,397	3,581	102
Denmark	—	8	8	26
U.S.A.	17	—	34	16
Others	523	8	1,054	—
Total	70,443	74,527	215,415	204,222

* Apparent errors in this table are due to the elimination of decimals.

Altogether 28 kinds of timber were exported, but of these only 5 kinds, namely *ramin* (*Gonystylus bancanus*), *meranti* (*Shorea* spp.), *sepetir* (*Pseudosindora palustris*), *jongkong* (*Dactylocladus stenostachys*) and *kapur* (*Dryobalanops* spp.) exceeded 5,000 tons in terms of round timber. Of the total timber cut for export, *ramin* made up approximately 73%, and *meranti* 9%. The large trade with the United Kingdom is almost entirely in *ramin*. During the first half of the year the relaxation of softwood import controls in the United Kingdom (late in 1953) caused considerable uneasiness among exporters, and this resulted in a sharp drop in *ramin* prices to a very low level. It soon became evident, however, that *ramin* is well established on its own merits, and when an association of producers was formed to stabilise prices they quickly rose again to a satisfactory level.

Except when they are collected in permanent forests, the Forest Department has little control over most types of minor forest produce, the most important of which are canes, cutch, *damar*, *getah jelutong* and other wild rubbers, illipe nuts and *nipah* sugar. Late in 1953 it became evident that a remarkable crop of illipe nuts was to be expected, and this was realised early in 1954. It was, in fact, a record crop, about twice as large as the previous record in 1947, and over 16,000 tons were exported. The total f.o.b. value of minor forest products exported, details of which can be found in the chapter on Commerce, was \$16,310,601, as compared with \$5,908,631 in 1953; revenue collected amounted to \$40,000 in Forest Department royalties and permit fees, and \$2,342,578.88 in export duties.

Research

For basic forestry research Sarawak depends mainly on various outside institutions, such as the Malayan Forest Research Institute, to which it contributes a small sum annually, the Colonial Products Laboratory, the Singapore Botanic Gardens, the Commonwealth Industrial and Scientific Research Organisations of the United Kingdom and of Australia, and others. Close co-operation with these was maintained during the year. Special projects in progress are botanical work and advice on timber problems (Malaya), the preparation of a key to Sarawak woods (Australia), mechanical tests of timber (United Kingdom), and analyses of Sarawak illipe nuts (United Kingdom). The Forest

Botanist, Malaya, visited Sarawak during the year, and made considerable collections. Two Sarawak officers are studying forestry in Australia.

Nevertheless a considerable amount of work must necessarily be done locally. During the year it was found possible to release one officer for an intensive ecological study of the peat-swamp forests, the most important source of the Colony's timber supplies, which provide many as yet unsolved problems in silviculture and forest management.

Spot trials of various species, *Albizzia falcata*, *Durio zibethinus*, *Eucalyptus siderophloia* and *Pinus caribaea*, on very poor podsol soils were added to the trials of *Agathis alba* and *Pinus merkusii* already in progress. These initial trials are of considerable importance, as the Colony contains large areas of podsols that are not only quite unsuitable for agriculture but also carry very poor forest.

A trial plantation of *ranggu* (*Melia excelsa*) on rather better soils, in conjunction with food crops,—rice and tapioca—had proved sufficiently promising, and it was decided to extend it to form a larger pilot project. Shortage of *ranggu* seed forced a change to a mixture of mahogany (*Swietenia macrophylla*) and *durian* (*Durio zibethinus*), the food crop and the young trees being planted over an area of twenty acres by the inmates of an adjoining leper settlement.

Revenue and expenditure

The following statement shows comparative figures of direct forest revenue and expenditure for the years 1953-54:—

	1953	1954
Revenue	\$1,153,604	\$1,198,365
Expenditure	370,844	418,693
	<hr/>	<hr/>
Surplus	\$ 782,760	\$ 779,672
	<hr/>	<hr/>

The expenditure figures cited above include expenditure of Colonial Development and Welfare Funds.

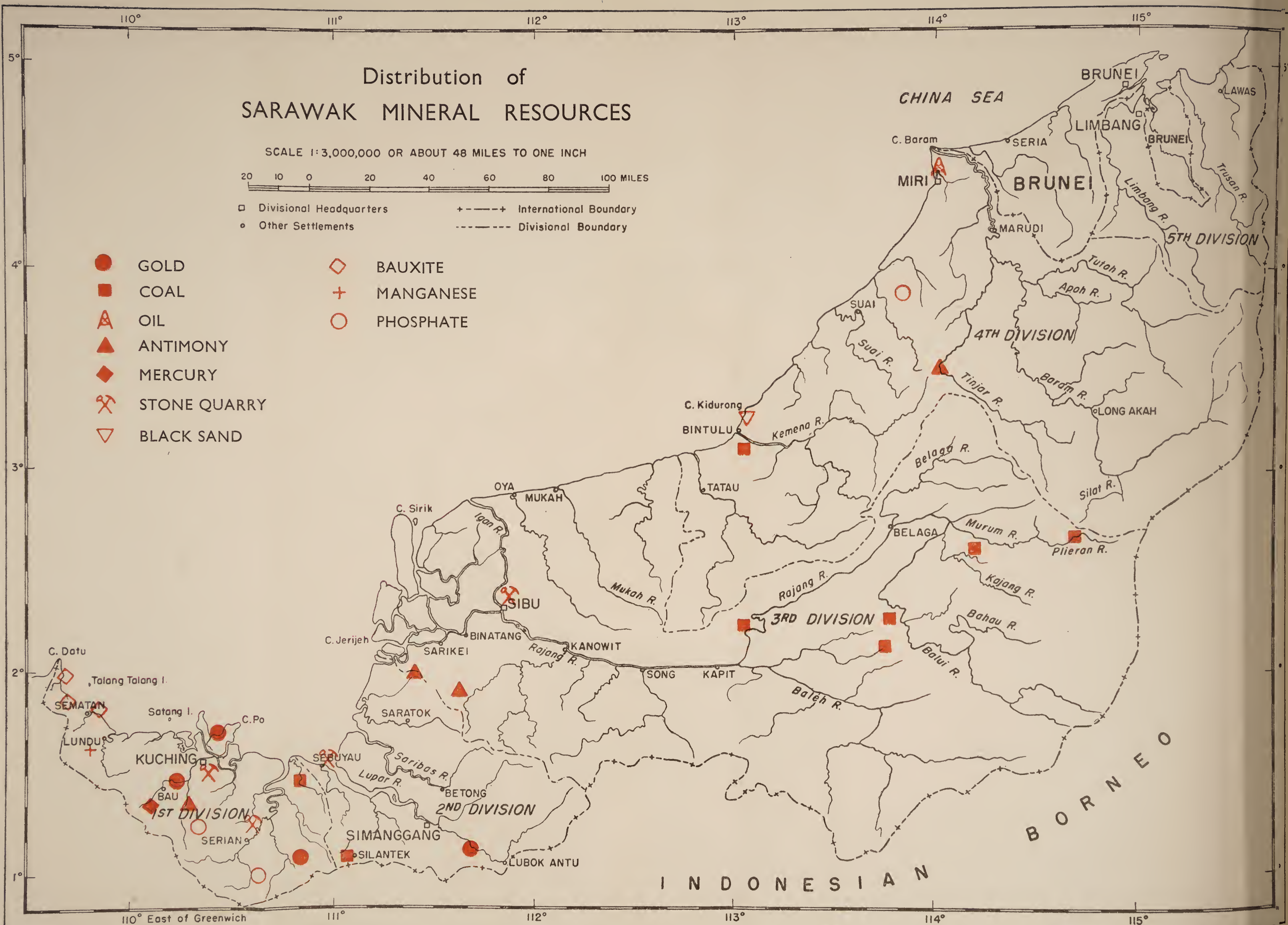
Distribution of SARAWAK MINERAL RESOURCES

SCALE 1:3,000,000 OR ABOUT 48 MILES TO ONE INCH

20 10 0 20 40 60 80 100 MILES

□ Divisional Headquarters + - - - + International Boundary
• Other Settlements - - - - - Divisional Boundary

- GOLD
- COAL
- ▲ OIL
- ▲ ANTIMONY
- ◆ MERCURY
- ⌘ STONE QUARRY
- ▽ BLACK SAND
- ◇ BAUXITE
- + MANGANESE
- PHOSPHATE



MINERAL RESOURCES

The main mineral resources in Sarawak are oil, gold, coal, stone, phosphate, bauxite, antimony, and mercury; some black sand and manganese occur. Their distribution is shown in Table 5. Minerals have long been important in the country's life, and today are still prominent in the economy. Gold and diamonds were first mined, later antimony, mercury, and coal, then more recently oil. Other known mineral resources are diamonds, limestone used for lime manufacture and suitable for cement, and clay used for bricks and tiles. Small occurrences of silver, lead, copper, gypsum, ilmenite, zircon, monazite, iron ore, sapphire, and kaolin occur, and salt is obtained by native methods in the interior. Minerals have probably been worked in this and adjoining parts of the island for about a thousand years, but as the geologist Posewitz wrote in 1892 of Borneo, "From the day when the companions of the unfortunate Magellan cast anchor before Brunei ... the wildest ideas have been in circulation with regard to its mineral wealth".

Between 1850 and 1900 an energetic search was made for mineral deposits, particularly coal, also antimony, mercury, and gold. Investigations were made by individuals employed by private concerns as well as by the State Government. Unfortunately virtually none of the information resulting from the work was published, and records available are insufficient for assessing the full extent of the investigations. Minerals were, however, important, and from 1823, after the discovery that antimony ore had a ready market, they figured prominently in the economy. Until about 1885, antimony ore was generally the most important mineral produced and, in the early days, often the leading export. Mercury was the leading mineral product for five of the six years between 1874 and 1879 inclusive, but after 1887 output declined and ten years later was negligible. Coal was the main mineral export between 1889 and 1898, after which gold took its place and headed the list continuously from 1899 until 1920. From this time onwards oil has been leading mineral export.

MINERAL PRODUCTION IN 1954

The Sarawak output of minerals and mineral products during 1954 had an estimated value of \$4,911,246 and consisted of oil,

gold, phosphate, bricks and tiles, lime and stone. The mining industry yielded government a revenue of about \$5,334,300; this comprises an estimated \$4,930,000 in company income tax and \$404,292 paid as direct revenue in the form of royalties and mining rents. The value of mineral exports was \$300,143,541 and was obtained from sales of oil and gold. Most of this oil however came from Brunei, was piped to Sarawak, and some of it treated at the Lutong Refinery; exports comprised crude oil, gasoline, kerosine, gas oil, fuel oil, diesel fuel, and diesel fuel bunkers. The oil industry, a Shell Group organization, operates on a large scale using modern methods. The other mineral industries are mainly small Chinese concerns; two gold mines are working in the Bau District of west Sarawak, phosphate is extracted from Niah Caves, and building materials are produced at the three main towns, Kuching, Sibu and Miri.

Mining leases in 1954 totalled 12 and covered 2,149 acres; this is the only land in the 47,000 square miles territory reserved for mining, excluding oil rights which are held over the whole country by Sarawak Oilfields Limited. During 1954 the search for oil was continued energetically by Sarawak Oilfields Limited. A little gold prospecting was done in Bau District by one Chinese concern. The 1954 mineral production is given in the table on page 73.

MINERALS WORKED

Oil

Sarawak has produced oil for 40 years. In 1954 output from the Miri field totalled 503,429 barrels valued at \$3,687,142; the oil was obtained from 170 pumping wells the depths of which range from 300 to 3,050 feet: it comes from sands of the Upper and Middle Miocene series.

TABLE 5. SARAWAK MINERALS PRODUCTION IN 1954

<i>Mineral</i>	<i>Production</i>	<i>Remarks</i>
Oil	503,429 United States barrels	Valued at \$3,687,142; royalty estimated at \$383,822. Oil exports from Sarawak totalled 4,732,932 long tons valued at \$300,089,301 and included gasoline; diesel, kerosine, gas oil, fuel oil, and crude oil. Most of this oil was produced in Brunei but piped to Sarawak where some of it was treated at Lutong Refinery before being exported
Gold	530.5 fine ounces	Valued at \$54,240; a royalty of \$2,712 was collected, and mining rents yielded \$4,304. The output came from two mines in Bau District
Phosphate	620 long tons	Valued at \$101,120; royalty paid was \$13,454. Extracted from Niah Caves, Bukit Subis, Fourth Division
Bricks & Tiles	2,032,500 bricks 250,000 tiles	Estimated value of bricks made is \$243,900 and of tiles \$32,500. The output of concerns at Kuching was 850,000 bricks; around Sibu companies produced 564,000 clay bricks, and at Miri companies made 618,500 bricks
Lime	354 long tons	Estimated value \$41,650. Made in the Kuching area by Chop Mong Soon, Ban Hin Company, and Swee Huat Seng. Estimated value approximately \$736,400
Stone	126,200 cubic yards	This stone was produced mostly in the First Division coming from Serian road quarries, the 7th Mile quarry, and Stapok quarry. In the Second Division Sebuyau quarry yielded about 14,600 cubic yards, and in the Third Division the production from Aup quarry was about 2,500 cubic yards
Gravel	1,609 cubic yards (estimated)	Estimated value \$14,294. This gravel was worked in the Third Division from the Rejang

Values are in Malayan dollars, \$1 being worth Sterling 2s. 4d.

The search for new oilfields continued energetically throughout 1954 and much of the \$26,000,000 spent on this work in British Borneo was used in Sarawak. Late in the year drilling started on the coast at Suai, about 45 miles southwest of Miri oilfield. This hole will probably be about two miles deep and will assess the oil-producing potentialities of this area where small quantities of good quality oil have been obtained from a previous test hole. Two other test holes were drilled, both in the lower Baram valley; one was 4,861 feet deep and the other 6,880 feet.

A significant development during the year was the extension by Orders in Council of Sarawak boundaries to include the area of the continental shelf. This gives the Colony jurisdiction over the natural resources in the seabed and at the end of the year arrangements had been completed for investigating the oil producing possibilities. It may well be that this will prove to be one of the most significant events in Sarawak economic history.

Oil from British Borneo is exported via Lutong in Sarawak, and 4,732,932 long tons valued at \$300,089,301 were shipped; most was crude oil, but, in addition gasoline, diesel oil, kerosine, gas oil, and fuel oil were exported. The Lutong refinery output in United States barrels during 1954 was gasoline 4,351,886; kerosine 2,233; gas oil 104,646; diesel fuel 9,515,277; fuel oil 3,125,853; isobutane concentrate 5,383; and deisobutanised gasoline 9,798.

Gold

This mineral has probably been mined in west Sarawak for several centuries and is known to be widely distributed in small quantities elsewhere in the country. Sarawak gold production from 1864 to 1954 inclusive is recorded at 1,213,253 fine ounces, which has produced a direct revenue of over \$2,500,000 in royalties, rents, and licence fees. The Bau gold field has been the source of practically all the gold produced and has been very fully prospected; whether it can regain its former importance is doubtful.

Gold produced in 1954 totalled 531 fine ounces valued at \$54,240; royalty paid was \$2,712 and rents yielded \$4,304; the output in 1953 was 422 fine ounces.

Coal

The best known coal deposits are at Sadong, the Silantek-Abok area, and in the Bintulu and Mukah districts: to date thirty coal occurrences have been reported in Sarawak. Most deposits consist of lignite but some higher quality coal occurs. Many of the deposits are small, contain thin or steeply dipping seams, and are isolated by communication difficulties. Development has been hindered by inaccessibility, by competition from coal exported from Europe, and by the limited local market.

During 1954 a number of new coal occurrences were discovered by Government geologists exploring the Rejang headwaters. The coal is of Miocene age; most of it is high grade lignite, but some is sub-bituminous: seams up to eleven feet thick occur. The deposits are too inaccessible to be mined at present. A geological survey has been completed of the Silantek area of west Sarawak where low-volatile bituminous coal occurs. The survey attempted to determine whether the good quality coal, known to be present in these deposits, was available in sufficient quantities to repay mining. Work at Silantek indicates that about 3,500,000 tons might be mined and there are possibilities of a larger tonnage. A programme for testing the estimate of the tonnage of coal has been prepared, and some enquiries concerning Japanese firms mining this deposit are being considered.

Phosphate

Phosphate in the form of guano occurs in many of the limestone caves in Sarawak. It is a resource of importance, being a valuable fertilizer situated in a region where agriculture is a main occupation, and where much of the soil is poor. Phosphate is worked on a small scale for local use at a number of places; the largest deposits, at Niah caves, are worked under the supervision of the Department of Agriculture.

Phosphate production during 1954 amounted to 620 long tons: the value was \$101,120 and a royalty of \$13,454 was paid to Government. Deposits containing about 2,000 tons of guano have been examined at Gunong Staat south of Kuching, and small amounts have been found in caves at Gunong Selabor, south of Serian.

The Niah caves are estimated to contain about 29,000 tons of phosphate; they consist of approximately two miles of explored passages and cover an area of approximately twenty-four acres; small streams and water seepages from the roof are common. The phosphate deposits originate from the accumulation during thousands of years, of bat and swift droppings, and insect remains; reaction with limestone has resulted in the formation of rock phosphate. The bulk of the guano is dry to slightly damp, although at a few localities it is saturated with water. Guano more than six inches in thickness covers about 150,000 square feet in the caves; the average depth of the main occurrences is eleven feet, the greatest depth of phosphate found was twenty-nine feet.

Antimony

The main deposits of antimony ore are in Upper Sarawak and consist mostly of the sulphide, stibnite. The mineral was discovered in 1823 and since then approximately 83,000 tons have been produced: there was no recorded mining of this mineral during 1954.

Mercury

Mercury occurs mainly as the sulphide, cinnabar, but small amounts of the metal itself have been found. The recorded output is 21,598 flasks, each of 76 lbs., mostly produced between 1870 and 1900: no ore was worked during 1954.

Aluminium ore

First discovered in 1949 in west Sarawak, this was prospected up to 1952 by geologists and mining engineers of the British Aluminium Company Limited. In the Sematan area about 5,500,000 tons of ore are possibly worth working.

Building materials and stone

Bricks, tiles, lime, stone, and gravel were produced; the value of the 1954 output was estimated at about \$1,068,744, and details of quantities produced are given in Table 6.

TABLE 6. 1954 SARAWAK PRODUCTION OF BUILDING MATERIALS AND ROADSTONE

PRODUCTION

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Locality and Producer	Bricks	Tiles	Lime (pikuls)	Stone (cibuc yards)	Gravel (cibuc yards)
FIRST DIVISION					
Swee Huat Seng	350,000	250,000	350	109,100	
Public Works Dept.	200,000		1,600		
Ban Hin Company	300,000		4,000		
Prisons Dept.					
Mong Soon					
SECOND DIVISION					
Sebuyau quarry				14,600	
THIRD DIVISION					
Siu Kiong Hin Co.	104,000				
Law Pang Kwong	220,000				
Wong Heng Kwong	240,000				1,609
Public Works Dept.				2,500	
Aup quarry, Sibü					
FOURTH DIVISION					
Wee Wong	227,000				
Shong Lee	350,000				
Sarawak Oilfields Limited	41,500				

Values: In Kuching clay bricks were \$120 per 1,000, tiles \$130 per 1,000 and limes was \$7.00 per pikul (16.8 pikuls equal 1 long ton). In Sibü clay bricks were \$130 to \$150 per 1,000.

The industry is run mainly by Sarawak Chinese, and operates on a small scale serving local requirements around Kuching, Sibu and Miri. Should the demand become larger, the output can be increased. Kuching had the largest and most varied production of constructional materials. The clay and sand used for brick and tile manufacture came from the valley of the Sarawak River, and the limestone used for making lime from Gunong Staat. Building materials were also produced at the other two population centres of Sibu in the Third Division and Miri in the Fourth Division. In the Third Division three concerns were operating the Sibu brick kilns at Pulau Kerto and Sungai Sadit. At Miri the bricks were produced by three companies.

Stone production recorded in 1954 was 126,200 cubic yards with an estimated value of \$736,400. Most of the stone was used for road construction and road repairs. For many years an obstacle to development in Sarawak, particularly of roads, has been the lack of stone. Beyond the limits of the Kuching-Bau area, occurrences of good quality stone were unknown, and no quarries of any size existed outside the First Division. The shortage was particularly acute in the Rejang estuary where the rapidly growing towns of Sibu, Sarikei, and Binatang, needed rock for building and road development and even imported it from as far away as Hong Kong. In 1951 the Geological Department was asked whether assistance could be given in finding stone supplies; from the systematic geological mapping done it was possible to indicate promising localities for testing. As a result the Sebuyau and Aup quarries have been opened. Sebuyau quarry, on a sheltered part of the coast is accessible to water transport, and can supply the surrounding region including the Rejang estuary. It is estimated that there are 13,000,000 cubic yards of first-grade, readily workable granite, in the part of Sebuyau hill where the Public Works Department is developing its quarry. The second quarry at Aup is near Sibu town, and although tropical weathering has resulted in a cover of overburden which has to be stripped, some of this material can be used locally for fill, and the quarry provides a useful local stone supply for the town.





During 1954 assistance was given in locating stone supplies for the proposed ninety miles Serian-Simanggang road. Fourteen possible quarry sites have been found near the road trace; the finding of these sites represents a saving of many hundreds of thousands of dollars when the road is built. The search was based on information collected during the regional geological survey of west Sarawak.

VIII

CO-OPERATIVE DEVELOPMENT

TWENTY-FIVE new Co-operative Societies with a membership of 1,125 were registered during the year: Eleven for the object of "Padi Saving", four "Rural Credit", three "Savings", three "Stores", two "Padi Milling", one "Thrift and Loan" and one "marketing" (fresh vegetables). Nine orders of cancellation of registration were made leaving one hundred and thirty seven Societies on the Register at the end of the year.

Agricultural prices for the main crops were not as remunerative as in recent years: pepper declined smartly by about 35% in March and April steadying from the middle of the year to about 40% of its price at the beginning of 1953. Rubber, starting low, crept very slowly upwards towards the price ruling at the beginning of 1953. Sago deteriorated to 31% less than at the beginning of 1953. The consequent reduction of cash in circulation was reflected in the distributive trades and made itself noticeable in Co-operative Societies. Honorary work, upon which nearly all Societies rely, assumed a more onerous aspect and saving became more difficult

The Sarawak Co-operative Central Bank, Limited, which was registered as No. 13/53 in October, 1953, completed its first full working year. In addition to receiving and investing funds from and making loans to members, it acted as agent for the supply of various essentials to member Societies. Its operations were made possible by the secondment of a clerk from the Treasury. Membership rose from ninety to one hundred and four Societies. A proposal to make available from Development funds a substantial sum over the period 1955 to 1960, principally for facilitating rural credit through the Bank was approved by Council Negri in August and the initial payment for 1953 was approved in November. Consideration is being given to the question of alteration of the By-laws of the Bank to enable acceptance of these funds.

An endeavour to obtain for Co-operative Societies registered in Sarawak treatment equal to that accorded to Co-operatives registered in Singapore and Malaya in the matter of Income Tax levied upon investments in those countries met with no success.

The report upon the visit of Mr. Peter Goullart of the International Labour Organisation from April to July, 1953 was received in June, 1954. Many of the recommendations made therein had by then already been implemented but provision was subsequently made for the potential implementation in 1955 of two outstanding recommendations, namely the employment in the Department of a Chinese Translator/Editor and the preferment of a request for more extended assistance by the International Labour Organisation in the form of the services of an expert upon Chinese and Co-operation for a further period of one year.

The Magazine "Co-operation in Sarawak" brought out twelve monthly issues in English, Malay (romanised) and Sea Dayak and a quarterly number in Chinese. Circulation of the Chinese quarterly increased from 300 to 500 copies per issue. The booklet "Malays of Sarawak! Awaken!" produced enquiries from beyond the boundaries of Sarawak. Co-operation continued to receive favourable comment in a number of local newspapers.

The School for probationary staff conducted in the premises of the "Saribas Co-operative Hostel Society" continued throughout the year. A progress examination was held in July and a Lower Standard Examination in December. Out of nine sitting this examination six passed. The standard reached was rather higher than in the previous year. Two Audit Clerks passed their Lower Standard Examination in July: Two Supervisors passed the Middle Standard Examination. A second Refresher Course (the first was held in 1953) for field and audit staff was held in June.

In July a convention of Co-operative Societies situated in the Rimbas and Paku rivers was held at Samu. It was opened by the District Officer, Saribas, and attended by 79 officers, members and representatives of sixteen Societies and by one Co-operative officer and eight field staff.

In September the Chief Clerk of the Department left Sarawak for a study course at the Co-operative College at Loughborough.

The Commissioner for Co-operative Development went on leave in October 30th to initiate the Commissioner designate who arrived on August 5th. During his absence the Assistant Registrar

of Co-operative Societies, Kuching, acted as Commissioner and an officer of the Education Department was seconded for this period, the secondment being subsequently extended up to the end of the year. This secondment was greatly appreciated. It enabled Societies to be visited and provided a valuable addition to the course of instruction at the probationers School.

One additional Senior Service Officer arrived on transfer from Nigeria and was in April posted to Miri in the Fourth Division where an office had shortly before been opened in anticipation. In May he spent some days in Kuching. Since that time several Co-operative Societies have been registered in the Fourth Division and the somewhat nebulous Co-operative aspirations of that area appear to be coming more into focus. It was unfortunate that this officer suffered from ill health and finished the year immobilised in a plaster carapace.

Continuity suffered due to a number of resignations during the year. These vacancies have been filled but the consequent lack of experience in the Department must necessarily retard progress.



Malay mat-makers at Kabong

Hedda Morris

IX

SOCIAL SERVICES

EDUCATION

THE Senior staff approved for the Education Department at the beginning of 1954 consisted of a Director, a Deputy Director, fifteen Education Officers including four temporary appointments, and three Woman Education Officers including two temporary appointments. During the year one of the temporary posts of Woman Education Officer was converted into an established post. The following additional posts were added to the departmental list during the year for the appointment of officers on secondment to Brunei: one Deputy Director to serve as State Education Officer, four Education Officers on the establishment and four on temporary appointment, one Woman Education Officer on the establishment and one on temporary appointment.

Two of the vacancies on the establishment for Education Officers in Sarawak were filled during the year and a third vacancy was likely to be filled early in 1955. A fourth vacancy remained unfilled. An Inspector of Schools acted as Education Officer in this vacancy during the year.

One Education Officer on the Sarawak establishment was seconded to Brunei, acting in the vacancy for Deputy Director, as State Education Officer, Brunei. Another Education Officer was seconded for the greater part of the year to the Co-operative Development Department.

The Temporary Education Officer representing the Roman Catholic Mission as Assistant Principal, Batu Lintang Training Centre and School, returned to the United Kingdom on the completion of his agreement. The Mission was able to loan an officer for a few months in the middle of 1954 until a replacement arrived later in the year. A vacancy for a temporary Education Officer on the staff of the Batu Lintang Training Centre was filled in the latter part of the year.

In spite of the secondment of the two officers referred to above, it was possible to staff the four Divisional Offices with an Education Officer in charge throughout the year. The staff of the department in the Third Division was strengthened by the appointment of three additional officers for supervisory duty, one Malay, one Dayak and one Chinese. These arrangements resulted in an improvement in the supervision and guidance given to managers and teachers in the various kinds of schools.

Divisional Education Officers attended staff conferences held twice during the year at the head office in Kuching, when views were exchanged and matters of policy discussed.

At the end of the year the highest number of teachers to date qualified from the Batu Lintang Teacher Training Centre. The course for the Grade IIIA Certificate was extended from two years to three years. Work was begun on the plans for the construction of permanent buildings at Batu Lintang.

A short course for Secondary School teachers, lasting one week, was arranged during July by the British Council and the Education Department acting in association. Three experienced teachers were invited from Singapore to give talks on modern methods of teaching English, history and geography, while a member of the Education Department conducted a series of discussions on practical problems in schools.

Vacation courses for Chinese teachers were held in Kuching and Sibu during the mid-year vacation. The courses were well attended, as many as 150 teachers in Sibu and 110 in Kuching attending some part of these courses. Practical suggestions were given on the teaching of many subjects ranging from English to school dramatics. The course provided an opportunity for teachers to become acquainted with a new series of text-books based on principles approved by the authorities in Malaya and Singapore. These vacation courses result in valuable contacts between departmental staff and the teachers, and produce good effects in the schools.

There was a further increase in the number of children attending school in 1954. The following figures show how the total enrolment has risen during recent years:—

1947	1948	1949	1950	1951	1952	1953	1954
29,616	33,464	35,628	39,656	42,284	45,451	49,072	52,788

The total enrolment now represents about 9% of the estimated population of the country. As in previous years, numerically the largest increase was among Chinese children in school but there were also appreciable increases in the numbers of Malay and other indigenous children attending school.

There was however no very marked change in the spread of primary education among the native peoples. There were still large areas where, in spite of the admonition of their own leaders, the Dayaks and other native peoples showed little interest in education and gave very poor support to the few existing schools. In a few areas, however, although the majority of parents and children seemed indifferent to the educational facilities available, there were keen minorities eager to make use of their opportunities. This situation produced, in some Dayak areas under Local Authorities, smaller enrolments in 1954 than in 1953; but the percentage of attendance remained remarkably high, in many schools averaging over 90 per cent in every month of the year. This was noteworthy in view of the long journeys made by small children over dangerous routes in the rainy season.

In these circumstances the Department's advice to Local Authorities was to concentrate their resources, in staff and finance, on those areas where there was already a good response, instead of dissipating their resources in efforts to stimulate demand in apathetic areas. Additional teachers produced by the output from the training centre were in many cases posted to existing schools where support over a number of years had been good, rather than being sent to open new schools in areas where the future response was uncertain. In schools with good attendance but with enrolment too small to justify a second teacher, a beginning was made with the introduction of a system of admitting new pupils only in alternate years, thus halving the number of classes with which the teacher has to deal.

For promising children who complete the four year primary course in vernacular schools, various schemes provide opportunities for continued education. The most promising boys are admitted to the Higher Primary and Secondary classes at Batu Lintang, which are at present run in conjunction with the Teacher Training Centre. Other boys and girls gain admission to the Higher Primary sections of Aided Schools as fee payers and a

scheme of Government scholarships provides assistance for promising children to enter these schools, if the parents cannot afford to pay the fees. Some Local Authorities supplement the Government scheme by making grants to help other pupils.

The Batu Lintang entrance examination held towards the end of the year demonstrated the progress of Dayak, and to a less extent, of Malay schools since the war. From the Second Division there were approximately one hundred applicants for teacher training and one hundred for the Higher Primary School, all of whom were of Primary Four standard or above. It was also encouraging to find that the average age of applicants was much lower—there were many boys aged ten or eleven in Primary Four—and that more girls were entering for these examinations. At the end of the year more than seventy children were awarded Local Scholarships in comparison with thirty-five in the preceding year.

Departmental policy continued to aim at providing primary education for as many children as possible by the provision of primary day schools giving a four year course. In several areas where the scattered nature of the population, the difficulty of communications and the farming habits of the people militated against the success of day schools, serious consideration began to be given to the necessity of providing central boarding accommodation even at the Lower Primary stage.

In Malay schools the contrast between the progress made at the larger schools such as Bintulu, Saratok and Simanggang, and the smaller rural schools, became more apparent. Standards are improving in the larger schools but in rural areas, for example in the Saribas area of the Second Division, lack of leadership has resulted in neglect of schools and falling attendances.

Secondary education is at present mainly provided by Christian Mission agencies, in schools where English is used as the language of instruction, and by Committees of Management of Chinese Schools in which the language of instruction is Kuoyu. In both these sections progress was recorded during 1954.

In the Mission English-language school system there was an increase in the total enrolment in secondary forms. The number

of pupils entering the examinations for the Cambridge Higher School and School Certificates remained however substantially the same.

There was an important change in the examination at the Junior Secondary level. Previously Sarawak pupils used to take the Overseas Junior School Certificate Examination organised by the Cambridge Syndicate. Candidates entered at the end of their fourth year of Secondary schooling, though recently some candidates had entered from Third Forms. The Cambridge Syndicate conducted this examination for the last time in December 1953. After discussion with school principals it was agreed that there was still a need in Sarawak for a public examination at the end of the Junior Secondary stage. It was decided therefore to organise a local examination, of equivalent standard to the old "Junior Cambridge", to be taken in the Third Form of secondary schools. The organisation of a local examination would, it was felt, have the advantage of providing an opportunity to introduce subjects and material of particular relevance to Sarawak. This examination was successfully conducted for the first time at the end of 1954. As a result, two hundred and eleven pupils qualified for award of the Sarawak Junior School Certificate. The number of pupils who in the previous year had been successful in the Cambridge Junior Certificate examination was one hundred and seventy-one.

A few English Secondary Schools began or completed new building operations during the year. One Mission School in Kuching completed work on a large new block, consisting of a hall, classrooms and science laboratories, which was opened by His Excellency the Governor in October. New Domestic Science Rooms were also opened at a Mission Girls' School in Kuching. A new Mission School building was completed in Miri, and new schools opened in Sibul, Kuching and Bintulu.

There were a few changes during the year affecting the management of Mission Schools. The Anglican Mission responsible for a large boys' school in Kuching constituted a Board of Governors to assist in the management of the school. The Roman Catholic Mission handed over a boys' school in Sibul to a teaching order of Christian Brothers.

The Government junior secondary schools, at Kuching catering mainly for the Malay population of the capital, and at Batu Lintang catering for boys of all the indigenous races from outstation areas, made satisfactory progress during the year. Both schools were able, for the first time, to produce pupils of the standard of the old "Junior Cambridge" and had successful results in the new Sarawak examination.

The demand for secondary education in the Chinese school system continued to be strong in spite of the high fees which are charged in these schools. As a result of a number of meetings between members of the Education Department and representatives of Chinese schools in Sibu and Kuching, a Sarawak Chinese Schools Common Examination Board was formed to conduct examinations for Chinese middle schools throughout the territory. The formation of this Board would, it was believed, result in a gradual raising of the efficiency of these schools and in improvements in their curriculum. Another development was the organisation of a common examination for all Chinese primary schools in the Fourth Division.

Post-primary education, in both the English and Chinese sections, follows an academic syllabus. The syllabus has been widened in recent years by the introduction in some schools of general science and domestic science. It is probable that many pupils taking these courses would benefit from education of a more practical nature, linked with commerce in the urban areas and with agriculture in rural areas. The provision of courses with a commercial or technical bias in some of the urban schools and of farm schools in other parts of the country is an important need, but both these future developments are dependent on trained staff which is not yet available.

The number of girls in school, and the proportion of girls in the total enrolment, continued to rise. There was also an increase in the number of women teachers; and it was satisfactory that seven out of the sixteen students graduating at the end of the year from the higher course at the teacher training centre were women. Fifty-eight girls were successful in the examination for the Sarawak Junior School Certificate. Although the curriculum in some girls' secondary schools has been widened by the inclusion of domestic science, it is likely that many of the girls now

taking these academic courses would benefit more from a modified course. One Mission secondary school for girls began a secretarial class for pupils who had obtained the Cambridge Junior School Certificate. In rural areas there is some demand from women for classes in cooking, sewing, first aid, and in reading and writing. Special attention was given to women's classes at the Sea Dayak development centre at Budu, and preparations were made for holding domestic courses for Dayak girls at Kanowit. Malay women are more reluctant to come forward for such classes and it is possible that the radio may prove at the present stage to be the best way of reaching this group.

Local Authorities and Municipalities continued to be responsible for primary education in their areas. There was some improvement in the schools under these Authorities but the administration of them still shows many weaknesses. These are not entirely due to the inexperience of the Authorities and their lack of executive staff, but are partly inherent in any scheme of administering widely scattered units in a country where communications are difficult. The willingness of local governments to raise funds for education to supplement the Central Government grant varied widely. The financial position of some Authorities further deteriorated but this situation was likely to improve in 1955 as a result of the recommendations of the Woodhead Commission, referred to later.

An important development in 1954 was the taking over of responsibility for primary education within its area by the Kuching Municipal Council. As the most densely populated and most educationally advanced district of the country, it was hoped that Kuching might give a lead to other local authorities in the management of its education. However, in spite of a lively interest in educational problems shown by the members of the education committee of the Council, all proposals for development and expansion lapsed on financial grounds. It appears unlikely that any major advance will be made until problems of rating and local taxation, especially as they affect the Malay community, have been solved.

Funds for trade, technical and commercial education have been provided in the Development Plan but before this project can be undertaken more information is required on the capacity

of local industry to absorb trained students. The availability of qualified instructors also remains a matter of doubt. Renewed efforts were made during the year to obtain the services of an outside expert to conduct an occupational survey and make recommendations for trade and technical education in the country. Under the Technical Co-operation Scheme of the Colombo Plan, the Government of Australia agreed to provide an adviser on trade and technical education to visit Sarawak and make recommendations. This adviser was due to arrive early in 1955.

The British Malayan Petroleum Company continued to offer Sarawak boys the opportunity of training in their Trades School at Seria. At the end of 1954, thirteen boys passed the entrance examination for admission to the Trades School in 1955.

The influence of communist propaganda on the Chinese youth of the country and the increased efforts of communist sympathisers to gain control of Chinese schools continued to cause grave anxiety. The number of young Chinese students who left Sarawak for China reached a new peak in the middle of the year. His Excellency the Governor, in addresses to the Council Negri and on other occasions, urged the Chinese community to greater vigilance against those who would lead astray the youth of the country and destroy Sarawak's way of life. He warned the public that Government was determined to take strong action wherever evidence was found that schools were being used for the indoctrination of children with communist teaching and alien loyalties. Unfortunately such action became necessary and one school, with the approval of the Supreme Council, was struck off the Register of Schools. It is regretted that by the end of the year the local community, in spite of repeated offers of help from government officers, had not yet formed a Board of Management to re-establish the school on sound lines.

Twenty scholarships for further education and training overseas were awarded during the year under schemes promoted by the Governments of Sarawak, Australia and New Zealand, and by other agencies. At the end of the year there were forty-three Sarawak Scholars studying overseas. The programme of overseas scholarships was again revised and provision for expenditure on this scheme was included in the new Development Plan for

1955-1960. Two unofficial members were appointed to the Committee which is responsible for recommending awards to Government.

An improved series of Chinese school text-books, produced in Singapore, was being gradually introduced into Chinese Schools by the more progressive Managements. There was still, however, a very great need for more reading material of all sorts with a regional background. Two books specially written for Sarawak schools were produced during the year; one on the geography of Sarawak, which was printed in Australia as a gift from the Government people of Australia under the Colombo Plan, and one on civics which was produced in Kuching by the Government Printing Office.

Community Development continued to be under the guidance of a Committee which comprised the heads of several departments, including the Education Department.

Two events of special importance in this sphere were the formation of the Adult Education Council, and the opening of Radio Sarawak. The Adult Education Council was formed by a group of public-spirited persons in Kuching to provide evening classes for young men and women anxious to raise their standard of education and in particular to improve their proficiency in languages. The classes were well organised and made a very successful beginning. Although Radio Sarawak has not yet initiated any specifically educational programme, there is no doubt that the series of talks on local affairs and administration, and on matters of general concern, together with the broadcasting of such entertainments as school "Quiz" contests, aroused interest and will tend to raise the standard of adult education. There would appear also to be a gradual spread of literacy amongst the adult population. An experienced observer reported during the year that "Five years ago written propaganda was useless in Sarawak as a medium of education in Co-operation. Today it is no longer so, and in fact it has become the most valuable form of dissemination of information."

The Education section of the Revised Development Plan of Sarawak, for the period 1955-1960, which received the approval of Council Negri in August, included provision for the construc-

tion of permanent buildings at the Teacher Training Centre; for trade and technical education, including commercial courses; for the extension of the scheme of overseas scholarships for degree and diploma courses, and for a scheme of local scholarships to provide financial assistance for promising pupils in need of it; funds were also provided for the production of vernacular literature and for the establishment of libraries at main centres of population. The plan also included funds for the provision of Government secondary schools, but implementation of this scheme and of various other draft proposals not included in the plan was to await the recommendations of the report referred to below.

The diversity of agencies responsible for schools in this country and the establishment in recent years of Local Authorities have produced much complexity in the system of financing education. In particular the regulations governing grants-in-aid to private schools, mission schools and Chinese schools, and the financial responsibilities of Local Authorities and Municipalities in the sphere of education are matters which for some time past have required review. Government was fortunate to obtain the services of an expert adviser, Mr. E. W. Woodhead, Chief Education Officer of Kent, who visited Sarawak and the neighbouring territories during September and October. Mr. Woodhead visited typical examples of different kinds of schools and met representatives of various educational agencies. His report was received at the end of the year and was being considered by Government. This very valuable piece of work is likely to mark a most important step in the development of Sarawak's educational system.

Co-operation with neighbouring territories in educational matters continued to be close and cordial. Sarawak increased the number of places for Brunei students in the Teacher Training Centre, and many Brunei pupils were being educated in Kuching secondary schools. The acting State Education Officer, Brunei, visited Kuching for discussions. A Regional Education Conference in Singapore enabled the Directors of Education to discuss problems common to the territories. The Governments of the Federation of Malaya, of Singapore, and of Hong Kong assisted in staff and other matters. The Professor of Education in the University of Malaya visited Sarawak in the middle of the year.

At the Budu educational and development scheme in the Second Division. The School building, dispensary and offices.



Hedda Morrison



Anna Pho

Kenyah Student at Batu Lintang Teachers Training Centre, Kuching.

Finance

The following figures indicate the increasing expenditure from official funds on educational services:—

	1947	1953	1954 (estimate)
Central Government funds	\$235,163	\$1,102,493	\$1,568,294
Local Authority funds	nil	258,380	505,253
Colonial Development and Welfare funds	nil	176,938	145,000
Total	\$235,163 £27,435	\$1,537,811 £178,815	\$2,218,547 £258,830

It was estimated that during 1954 the Mission authorities spent approximately \$1,137,100 (£132,221) and the management of Chinese schools some \$2,462,000 (£286,279) on educational services. These amounts were mainly derived from school fees and subscriptions and do not include the expenditure of money received as grants-in-aid from Government or Local Authority funds. The figures quoted above do not take into account the value of contributions made by school committees, in labour and in materials, for the construction and maintenance of school buildings and furniture in rural areas.

Mission Schools are financed mainly by pupils' fees and by grants from the Central Government or Local Authorities. In 1954 grants from the Central Government amounted to approximately \$165,520 (£19,311), compared with \$160,833 (£18,763) in the previous year. In addition, nine Local Authorities gave financial assistance to Mission primary schools in their areas. Provisional figures indicate that in 1954 Local Authorities spent about \$62,000 on grants-in-aid to these schools, compared with about \$35,000 in the previous year. For the urban schools which cater mainly for the Chinese the grant from the Central Government was calculated on a percentage of the salaries of approved staff, while a more favourable formula was in force for the rural schools catering for the indigenous peoples. The grant for rural schools employing teachers trained at Batu Lintang was assessed at a rate which would enable managements, with the aid of a reasonable contribution from the community concerned, to pay these teachers the same emoluments as would be paid to similar teachers in the Government service.

Chinese Schools

There were 242 Chinese schools at the end of 1954, with 1,084 teachers and 31,839 pupils. The corresponding figures for the previous year were 238 schools with 999 teachers and 30,084 pupils.

Most Chinese schools are controlled by committees elected annually by the local community. Funds are provided by school fees from pupils and by donations and subscriptions from associations and individuals. "Block" grants, assessed on enrolment and efficiency, are paid to Chinese schools on the aided list. In addition most of these schools qualified for a special grant in respect of teachers of English of approved standard. Total grants amounting to approximately \$140,590 (£16,402) were paid to Chinese schools in respect of recurrent expenditure during the year, of which \$69,466 were from Central Government funds and \$71,130 from local government funds. The total amount of grants paid in the previous year was some \$112,000. The number of Chinese schools aided by public funds was 107, with a total enrolment of 21,589 pupils.

There were 3 Junior Middle Schools and another 12 schools had combined primary and middle departments. A Senior Middle course was held at four schools. At the end of 1954 there were 3,194 pupils in the Middle (Secondary) sections of the Chinese school system, compared with 2,727 at the end of the previous year.

The Chinese "National Language", Kuo-Yu, is the language of instruction in Chinese schools in Sarawak but increased attention has been given to the teaching of English as a subject.

In spite of the fall in the value of pepper, and the low price of rubber during most of the year, the number of pupils in Chinese Schools maintained the usual annual increase. Overcrowding in schools was in some places a serious problem. New school buildings were erected during the year in Simanggang, Miri, Lutong and along the Kuching—Serian Road. Most of the new buildings showed considerable improvements on previous designs and standards. The supply of new teachers from Middle Schools in Sarawak was reasonably adequate to staff primary schools.

There were more difficulties in staffing Middle Schools where recruitment is from outside sources, but a number of managements were successful in obtaining qualified men from Hong Kong, including a few teachers of science.

The teaching of English continued to show some progress.

There was an improvement in the general tone and discipline in many schools where good headmasters were supported by responsible Boards of Management. In some areas however the situation was much less satisfactory and, as stated earlier, one school was struck off the register.

The first Common Examination for Chinese primary schools in the Fourth Division was held at two centres, Miri and Baram. A total number of 118 pupils from the various Chinese primary schools in the Division sat for the examination. The Common Examination Board of the Chinese Schools in the Third Division continued to function satisfactorily. An important development was the formation of a Common Examinations Board for all Chinese Middle Schools in the territory.

Teacher Training

Teacher-training is carried on at Batu Lintang near Kuching, at a centre which serves the whole Colony. The staff consists of a Principal, two Assistant Principals representing the Anglican and Roman Catholic Missions; and an assistant staff composed of local teachers and two teachers from the United Kingdom, one of whom is a woman teacher trained in infant and junior methods.

The co-operation of Government and Missions in training at one institution teachers for all types of school is a most important feature of the centre, where students of many races, religions and languages have successfully developed a mutual understanding and a corporate spirit.

This important scheme was still having to be conducted in reconditioned camp huts. Plans however were being prepared for the construction of permanent buildings.

From its opening in 1948 the training centre was financed under a five-year Colonial Development and Welfare Scheme which expired in March 1953. From the date the centre has been financed solely from local funds.

All student teachers receive free board, tuition and transport, and a system of personal and family allowances ensures that any promising student can benefit from the scheme regardless of the financial circumstances of his family.

Owing to the length of time required by many students to reach their homes, there is only one term at Batu Lintang, which lasts from February to November, with short organised "breaks".

There are two courses for teachers depending on their academic standard at the time of admission. The course for the Grade IIIA Certificate caters for student-teachers with a standard of approximately Primary IV. It is hoped that within a few years the minimum qualification will be raised to Primary VI. Owing to the urgent demand for teachers the course had at first to be limited to two years' duration, but it was decided that as from the beginning of 1954 the course would be lengthened to three years' duration in order to cater for the growing need for teachers capable of dealing with higher primary classes. The Grade IIIA course trains teachers for District, Local Authority, Private and Mission Schools throughout the country. For the Grade IIA course, which lasts two years, Junior Secondary qualifications are required. The course trains teachers mainly for Chinese and Mission Schools.

Both courses include the study of English, for which there is a demand from all peoples, and some academic subjects, as well as a practical knowledge of teaching principles and methods and of school organisation. Emphasis is also laid on the need to maintain and develop traditional skills and other aspects of indigenous cultures. Religious instruction is arranged for both Christian and Muslim students and chapels are provided for different sects.

The Assistant Principal representing the Roman Catholic Mission was withdrawn on the completion of his agreed period and was replaced at the end of the year. The vacancy for a teacher on secondment from the United Kingdom was filled by an experienced primary school teacher from England. A local member of the staff was sent for a training course in England where another teacher on the staff had been sent the previous year.

District Schools

Government Primary Schools were re-named District Schools in 1953. These schools are managed by the Education Department, and the teachers' emoluments and the cost of equipment are met from Government funds. The local people provide and maintain the school buildings, furniture and teachers' quarters. Pupils pay a small monthly fee but there is a system of remissions for necessitous cases, the arrangements being left largely in the hands of school committees which function, with advisory powers, at these schools. Pupils provide their own stationery.

At the end of 1954 there were 37 District Schools, staffed by 74 teachers, and having 2,239 pupils on the roll. The corresponding figures for 1953 were 41 schools with 99 teachers and 3,527 pupils. The changes were caused by the transfer of some of these schools to the Kuching Municipal Council and the Lawas District Council.

District Schools provide a primary course only. The vernacular is the medium of instruction. There is a strong demand for English, which is now included in the curriculum, beginning in Primary One (the first year of school) at all District Schools where English-speaking teachers can be provided.

Opportunities to continue their education in higher primary and junior secondary classes are available to promising pupils from District Schools either by scholarship to Mission English schools or by admission to two Government English schools, the Maderasah Melayu in Kuching and the Batu Lintang School which is at present run in conjunction with the Teacher Training Centre.

The Maderasah was formerly a vernacular primary school but is now developing into a junior secondary school for Malay pupils from the Kuching area. Admission to the school is by competitive examination from District and Private Schools in the neighbourhood. Enrolment increased in 1954. In spite of staffing difficulties twenty-one candidates entered for the first time in the Junior Certificate examination and seven were successful.

The Government School at Batu Lintang provides higher primary and junior secondary education for boys of the indigenous peoples chosen from those who have completed the lower

primary course in outstation schools. In 1954 there were 103 of these boys in classes ranging from Primary Five to Form Three. In addition 5 Batu Lintang boys of Form Four standard and above, for whom it was impracticable to provide classes at Batu Lintang, attended senior classes in Secondary Schools in Kuching.

Local Authority Schools

Local Authorities and Municipalities are responsible for primary education in their areas. At the end of 1954 there were 112 schools under the management of local governments, with 174 teachers and 5,515 pupils. In 1953 there were 99 schools with 126 teachers and 3,608 pupils. Some of this increase was due to the transfer to Local Authorities of schools formerly under the management of the Central Government.

There was also a considerable number of Mission and Chinese Schools in Local Authority areas which received grants-in-aid from the Authorities.

There was a small but noticeable improvement in the general standard of efficiency in Local Authority schools. Most of the teachers in charge of these schools are young men who completed their training after 1949 and are now acquiring some experience as headmasters. More frequent visits to these schools were made possible by the appointment of two additional Group Supervisors at the beginning of 1954.

In the middle of the year one Group Supervisor was sent to England on a course of instruction.

There is still however much weakness in the administration of the Local Authority school system, especially in the collection of pledges, fees and other monies due to them.

Some progress was made in the definition of terms of service for Local Authority employees, including the establishment of a provident fund for Local Government servants.

Plans were made during the year for the information of new Mixed Local Authorities in the Third Division, which would begin to assume responsibility for the administration of primary education in their areas.

Private Schools or Village Committee Schools.

In areas where no Local Authority had yet been formed the indigenous peoples were encouraged in the meantime to open schools under the management of committees comprising local representatives. These "Village Committee Schools" or "Private Schools" are eligible for financial assistance from Government. There were 54 schools of this type at the end of 1954 with 66 teachers and 2,573 pupils. The corresponding figures for 1953 were 49 schools with 65 teachers and 2,407 pupils.

Grants from Central Government funds amounting to approximately \$18,474 (£2,155), as compared with \$14,203 (£1,657) in 1953 were paid during the year to those schools which applied for assistance. A number of Private Schools received professional guidance from Mission representatives in the area.

Mission Schools

At the end of the year there were 94 schools in Sarawak under the management of various Christian missions. There were 381 teachers in these schools and 10,622 pupils. At the end of the previous year there were 85 Mission Schools with 320 teachers and 9,446 pupils. The new schools included new primary schools in Kuching, Sibul, Miri, Bintulu and Sarikei, and some small schools in rural areas including a few which had previously been managed by village committees. There were increased enrolments in the large urban schools and an expansion in the secondary sections of these schools.

At Mission Schools in the main towns, English is the medium of instruction. Most of these schools have secondary departments, from which a large proportion of the entrants to the Government Service are drawn. There were 17 Mission Schools with secondary departments, having a total enrolment of 1,881 compared with 1,679 secondary pupils in the previous year. Five candidates from these schools took the Cambridge Higher School examination, for the full certificate, at the end of 1954; in the previous year for the first time two candidates were awarded Higher School Certificates. There were 97 candidates, including 16 girls, for the Cambridge Overseas School Certificate. This figure compares with 108 candidates in 1953 of whom 56 obtained certificates. In 1954, as explained earlier, a Sarawak Junior Certi-

ificate examination took the place of the junior examination previously conducted by the Cambridge Syndicate. 195 entrants from Mission Schools were successful in this examination, compared with 171 who obtained the Cambridge Junior Certificate in the previous year.

There were 90 students, including 30 from the State of Brunei, taking the Grade III course in 1954, and 30 students taking the Grade II course. At the end of the year 40 students, of whom 10 were from Brunei, qualified for Grade IIIA Certificates and 16 students, including 7 girls, qualified for Grade IIA Certificates. At the beginning of 1954, a group of 54 students, including 20 from Brunei, was admitted for the Grade III course. A further 14 students joined the course for the higher grade of certificate which is mainly for teachers in Mission and Chinese Schools. It was decided that, in future, candidates for this course must hold at least a Junior Cambridge or Sarawak Junior Certificate.

A system of "Education Days" was begun. Groups of students were given periods for visiting and studying places of interest in connection with local industry, geography, administration, and, after subsequent study in the library, wrote on different aspects of the subject studied. During "breaks" in the year, staff and students organised expeditions to the surrounding country, including the ascent of some mountains.

A small number of Sarawak candidates, with School Certificate qualifications, were successful in seeking admission to training courses in Singapore.

Higher Education

Sixteen scholarships for further education and training overseas were awarded during the year under the Government's scholarship scheme. In addition a UNESCO fellowship was awarded by the New Zealand Government, two scholarships were awarded by the Government of Australia under the Colombo Plan, and a bursary in the United Kingdom was awarded by the British Council in conjunction with the Kuching Municipal Council. Three of the Sarawak Government awards were for courses at the University of Malaya, one was for a course in Singapore and the remainder were for courses of various types in the United Kingdom. One of the latter awards for a course in X-ray tech-

niques was made in conjunction with the National Association for the Prevention of Tuberculosis. The scholarships awarded during the year included degree courses in Arts, Medicine and Law, and other courses in Teacher Training and educational methods, Co-operation, Printing, Forestry, Midwifery, Pharmacy, Museum Techniques and Anthropology, Secretarial training and an engineering course in Telecommunications. A new scheme of overseas scholarships was under preparation in order to implement the revised Development Plan of Sarawak for 1955 to 1960. Towards the end of the year a further very generous offer was received from the Government of Australia to increase the facilities for training under Australia's Technical Co-operation contribution to the Colombo Plan. A few students made their own arrangements for admission to overseas institutions.

Community Development and Adult Education

The Department's principal scheme of community development is the Rural Improvement School at Kanowit. This school provides a two-year course designed to help selected couples and young men to gain practical knowledge of improved methods of agriculture, animal husbandry, elementary hygiene and infant welfare, to become literate in their own vernacular and to learn simple farm arithmetic. During the course students receive free tuition, board and transport and a monthly cash allowance for essential requirements. The main building consists of a community centre of an improved longhouse design which provides classrooms, dining and recreation rooms and a dispensary. Students and their families live during the course in the longhouse or in individual farm houses of different designs, which have been built on small holdings within the school estate. This arrangement provides pupils with an opportunity to compare different types of accommodation so that they can begin to form opinions as to which would be the more suitable for adoption in their areas. The school grounds occupy some 400 acres, one third of which is reserved as forest. The remainder, which is sufficiently diversified to provide examples of typical farm land throughout the Colony, is used to demonstrate improved techniques of tropical agriculture, especially wet padi farming. The scheme was financed from Colonial Development and Welfare funds from its inception in May 1948 to April 1952, since when it became a charge upon the Colony's revenue.

Seven couples, fifteen bachelors and one widow completed the two-year course in April 1954, making a total of fifty-two couples and eighteen single persons who had completed the course by that date. Many of these continued to earn favourable comments on their work and on their influence upon their neighbours.

The acting Principal, an Agricultural Development Officer loaned by Australia under the Colombo Plan, was in charge of the school for the whole year, and carried out extensive follow-up visits to former pupils in the Third Division. The school was still without a senior woman officer but a trained midwife joined the staff in July and took charge of the female and medical work of the school in the newly completed building for girls. Plans were made to hold a short course in homecrafts for girls, which it was hoped would provide experience on which to base a longer pre-marriage domestic training course.

A new post of Assistant Principal was created during the year. A local candidate with administrative and teaching experience was appointed; he is a Sea Dayak. At the end of the year a member of the staff returned to Kanowit after successfully completing the teacher-training course for the Grade IIA Certificate at Batu Lintang.

Work was begun during the year on extending the school longhouse in order to make the accommodation sufficient for all families to spend part of the course living in this improved design of longhouse. A pumped water-supply from the river was installed and additional staff quarters were begun.

Further work on the adult literacy scheme at Muara Tuang, a Malay rural area in the First Division, showed that the facilities provided in the village for reading were not being used and a large number of those taught to read had in fact lapsed. This was partly due to lack of staff to visit frequently enough, but the interest was clearly lacking. The reading material obtained from Kuala Lumpur by the Information Office was of course not ideal for Sarawak purposes but had appeared likely to attract readers.

After some preliminary enquiries among Malay coastal villages in the First Division, there appeared to be a demand for literacy in the Lower Sadong area. Classes were started at Semera.

About 170 men enrolled but attendance was irregular and only one-third completed the two primers. It does not appear that an adult literacy campaign will produce lasting results in this area unless literacy is seen to be essential to some much-desired practical improvement in way of living.

The Community Development Scheme at Budu in the Second Division continued to make progress under vigorous leadership. All visitors to Budu throughout the year commented on the energetic measures being taken to improve the health of the people, to train them in co-operation, and to introduce new agricultural techniques. There were inevitably some set-backs and disappointment during the year but the enthusiasm of the Sea Dayaks in this area, their willingness to contribute their own labour, funds and time to the scheme and their pride in their achievements, were very remarkable. The most important task that lies ahead is the training of local leaders to carry on the scheme when the present expatriate staff is withdrawn.

An important event in the year was the formation in February of the Adult Education Council. The council was composed of representatives of various associations and societies in Kuching. Though at present its scope is limited to Kuching the council hopes to extend its activities later to other areas. The aim of the council is to provide young people who have left school with an opportunity to raise their standard of English or Chinese to a junior secondary level, so as to increase their general proficiency and to make them better able to benefit from commercial or technical instruction. Classes were held in the evenings and covered courses in English and Chinese, as well as in Arithmetic and General Knowledge. Classes began in May with an enrolment of 174 students in six classes. The number of students increased rapidly and by the end of the year there were 451 students enrolled, of whom 45 were girls.

Youth Work and Out-of-School Activities

Several associations and clubs (some conducted by old students of schools) whose objects are to foster social, educational and cultural activities were active during the year. The Amateur Athletic Association, formed in Kuching in the previous year, held its first public meeting; football and badminton were popular

games and many Chinese Schools took part in basket-ball competitions. A new cultural society was formed in Kuching. There is still a need for more, organised out-of-school activities and in urban areas more recreational facilities for boys and girls who have recently left school. The main need is for trained leaders to help in the organisation of voluntary youth movements. Under a Government scheme, grants were offered to local communities and organisations to help them meet the cost of providing playing-fields and other recreational facilities.

The British Council

The British Council continued to do valuable educational work by providing material and services for Kuching and outstations. The council's libraries and reading rooms at Kuching and Sibu helped to meet the needs of a growing number of students and teachers. A catalogue of more than 10,000 volumes was printed and distributed. Another 2,000 volumes were kept for circulation in teachers' book boxes. During the year 345 boxes of books were despatched to schools and 542 to individual borrowers in outstations. Educational films were lent to the oil-fields and to other places equipped with projectors. In Kuching British Council staff gave 191 film shows for schools and a few clubs. A Secondary School Teachers' Week, referred to earlier, was organised in July and staffed by specialist instructors brought over from Singapore. A brief experimental introductory course was provided for nine Sarawak students about to leave for England. British Council bursaries for study in England were awarded to two officers of the Kuching Municipal Council, and a scholarship in educational subjects was awarded to a senior Chinese teacher. The Chairman and one other member of the Kuching Chinese Schools Board of Management visited schools and institutions in England as guests of the British Council. Secretarial assistance was lent by the Kuching office of the British Council to the newly formed Sarawak Council for Adult Education.

Scouting

The number of Scouts and Cubs increased considerably during the year, particularly in outstations where several new troops, of both sea and land scouts, were formed. In most cases the Scouters were trained teachers from Batu Lintang. In addition to the existing local associations in the 1st and 2nd Divisions, new local

associations were formed in the 3rd, 4th and 5th Divisions. The movement owed much to these committees which were energetic in their encouragement of scouting.

The main event of the year was the visit to Sarawak of the Chief Scout of the Commonwealth, Lord Rowallan, who spent a week in the country visiting scout troops.

Girl Guides

During 1954 Guides and Brownies were started in Sibu and Sarikei, and restarted in Miri. In Miri, the first Cadet Company was formed with the object of training local girls as Guides, to replace the European Guiders, thus overcoming the present shortage caused by an everchanging European population.

In July, Sarawak received a visit from Miss Helen McSwiney, Travelling Commissioner from Headquarters in London. While in Sarawak Miss McSwiney visited all outstations where Guiding is carried on, and conducted a week-end Guider training camp in Kuching which was attended by local Guiders including one from North Borneo, and a Life-Saving Guard Leader from the Salvation Army Home in Kuching.

The number of Guides and Brownies throughout the territory increased considerably during the year.

Boys' Clubs

The Boys' Club and Hostel in Padungan, Kuching continued to fill a useful function in providing recreation for boys in Padungan and giving accommodation to homeless boys. A new recreation hut for the use of the Club and Hostel was created on a convenient site adjoining a nearby sports field.

MEDICAL SERVICES

Although the medical services in Sarawak still leave much to be desired, considerable progress was made during 1954. Most of the advances achieved during this year were what might be called extra-mural, that is to say outside the principal hospitals in the State, and perhaps the most notable of these advances was the opening in Kuching of a large new Health Centre to treat

four kinds of patients: on the ground floor on one side general female out-patients and on the other side general male out-patients; on the 1st floor on one side prenatal patients, and on the other side dental patients. This new Health Centre was opened in August and at the end of the year was treating upwards of 500 out-patients daily. The principal difficulty in this Centre, as elsewhere in the department, was the provision of adequate trained staff, but it was possible by the operation of a roster system to arrange that there was always at least one doctor in attendance.

The main problem in the mind of a medical administrator in Sarawak is to maintain a proper balance between the urban and the rural medical services. It is essential that as good a central hospital service as possible should be provided, and it is not possible to avoid the necessity of providing in the main towns treatment at specialist or near specialist level for surgical emergencies and similar cases; but at the same time the fact has to be recognised that one doctor working in a wild country district can undoubtedly save many more lives than one doctor working in a hospital in a big town. Attempts have been made, therefore, through the year to strengthen the rural services and one of the means adopted has been to recruit young people from the most distant parts of the country and to bring them in to Kuching for some elementary training in the care of the sick and in public health. It is now a common sight to see long-haired up-country youths working in the hospital in Kuching, and it is particularly pleasing to see three up-country girls, their long ears heavily laden with ear-rings, now learning in Kuching to be midwives.

The two Travelling Superintendent (Health & Medical) posts, posts believed to be unique in colonial territories, have proved a great success, and the work of these Superintendents throughout the year has done much towards this strengthening of the rural services. They spend all their time travelling, principally in remote areas otherwise untouched by Western medicine, and independent reports reveal that their work is of very great value. Sometimes they travel together, but this practice has proved less successful since the people clamour for treatment and tend to spurn the hygienist. It looks as though the best arrangement will

be for the hygienist to travel first, and after he has reported on the incidence of disease in any particular area, arrange for treatment later by his colleague.

Along one river, the Tinjar, with a population of about 3,000, where the incidence of yaws was found to be very high, a mass penicillin campaign was conducted, and every man, woman and child in the area was injected with 1.2 million units of Procaine Aluminium Monostearate (reduced doses for children). Under Sarawak conditions, where communications are difficult it is preferable, in regions where the incidence of yaws is very high, to inject every person without exception. The more scientific way of first submitting everybody to a careful examination, including blood tests, would only result in many cases being missed, whereas if, with careful preparation, every soul in a longhouse is lined up and injected it is reasonably certain that yaws have been eradicated from that community. Some authorities would say that such treatment would also eradicate gonorrhea and syphilis; the truth with regard to these two diseases is probably that a mass penicillin treatment will reduce incidence in a community almost to vanishing point if not quite eradicate them.

For the treatment of yaws the arsenicals were entirely superseded by penicillin during 1954.

Another rural disease, which has been causing some concern since the realization in 1953 that it was widespread in Sarawak, is trachoma, and an experimental campaign was conducted during the month of October in a Dayak longhouse near Bintulu with a population of about 450 people for the mass treatment of this disease; 1% aureomycin ointment in one-ounce collapsible tubes was used. The medical officers lived in the longhouse for a month and twice a day each inhabitant of this house had aureomycin instilled into his conjunctival sac; acute cases of conjunctivitis of all forms of course responded to this treatment, but as was expected, chronic cases with scarring or entropion showed little or no improvement. No conclusion could be reached as to the total effectiveness of this mass treatment, and the only thing learned by the campaign was its feasibility as an exercise in administration.

The big medical news of the year was undoubtedly the successful conclusion of the WHO-assisted pilot anti-malarial project on the Baram River. Now, after two years of residual spraying of all houses on this river, it is clear that malaria propagated by *Anopheles leucosphyrus* under Sarawak conditions can indeed be completely controlled by residual spraying. This is a notable conclusion. *Leucosphyrus* is known to be an inefficient carrier although it is the principal vector, and it may be that this inefficiency is the cause of the happy results found here. Control of *leucosphyrus* which is a jungle breeder and which can travel up to two miles in search of blood would be impossible by anti-larval measures, and, in fact, clearing or similar larval control work would possibly result in the introduction of more efficient and hence more dangerous vectors. The results of the Baram experiment have proved so satisfactory that money has now been provided to extend control by residual spraying over the whole country, and it is hoped that by 1960 malaria in its present widespread endemic form will be a thing of the past in Sarawak. It is most likely that the chronic ill-health, infertility and even poverty of most of our rural peoples is in the final event caused by malaria, and, when malaria is controlled, conditions in Sarawak may be vastly improved. In this as in all other activities of the Medical Department the chief handicap is shortage of trained staff, and ill health amongst the limited available trained personnel during the latter part of the year was a major handicap.

Statistics of numbers treated by the various branches of the Medical Department during the year are not yet available at the time of writing, but there is no doubt that they will, with few exceptions, show a very considerable increase over the numbers receiving attention in previous years; particularly so in the case of attendance at Maternity and Child Welfare Clinics, where the numbers will prove about double those of previous years. Many new clinics have been opened and attendances at old clinics have vastly increased.

The midwives training programme has progressed well; girls with very little education are recruited from all parts of the country including the extreme hinterland and brought to Kuching or Sibü for training for a year or more in the elementary



His Excellency the Governor presenting certificates of discharge to patients who have been cured from leprosy at the Leper Settlement, 13th mile, Penrisen Road, 30th August, 1954.

Start of the one-mile race at the first championship meeting of the Kuching Amateur Athletic Association, 24th July, 1954.



principles of midwifery. After training they return to their own districts and practise what they have been taught. Some of these girls are paid during their training period by the Government, some by the Local Authority of the area from which they come, some by private arrangement by groups of interested persons in their area, and some by combinations of the other methods. There is as yet no legislation for the registration of midwives in Sarawak, but it is clear that this will soon be necessary and draft legislation was proposed during this year. This will provide for the regulation of the practising of midwifery and provide penalties for unregistered practice. Persons already practising midwifery habitually and for profit will be eligible for registration even without formal training subject to certain safeguards, but no new midwives will be permitted except with recognised training and appropriate certificates.

The child health programme has been very considerably assisted during the year by UNICEF which has provided considerable quantities of powdered skimmed milk for distribution as well as certain diet supplements such as vitamin capsules and equipment for midwife and nurse training schemes. The Government has supplied in addition large quantities of evaporated whole milk and these free issues help not only directly by adding to the diets of mothers and children, but also indirectly by attracting them to the clinics.

The training of junior staff is a major problem since there are not enough educated boys and girls as yet leaving schools in Sarawak to provide sufficient recruits for the Medical Department; however, notable advances have been made during 1954 and there are now two complete training schools for nurses (male and female) in operation, one at Kuching and one at Sibü. At the year's end there were eighty-four pupils under instruction in these training schools.

A new building which is being given priority is the new Mental Hospital. The present mental accommodation at the rear of the General Hospital, Kuching, is mediaeval although minor improvements are continually being made. A modern Mental Hospital is, however, essential and draft plans for this have already been approved. Provided that no unexpected difficulties are encountered, there is every reason to suppose that this new

hospital will be ready for occupation before the middle of 1956. It will be situated some seven miles out of Kuching and will provide accommodation for about 200 patients with all the most modern facilities for treatment. Attempts are now being made to recruit from overseas, specialist staff for this institution.

Another institution which deserves special mention for the year 1954 is the Leper Settlement, thirteen miles from Kuching. A big building programme was successfully undertaken during the year and will continue during 1955 so that all the patients will then be housed in new bright and airy barrack-type houses.

The most marked change in the Leper Settlement during the year, however, has been less tangible and that is a complete change of atmosphere amongst the inmates; they are now no longer prisoners but simply patients, as in any other hospital, gradually progressing towards a cure. This happy state of affairs has been brought about largely by the use of modern treatments, but other factors have also played a large part. More than one hundred patients were discharged to their own homes during the year, and the return of such a large number of ex-lepers to the community in itself presented a special problem which was overcome by making a ceremonial affair of the leaving of the settlement by each batch of patients. Twice during the year there was a grand ceremony like a speech day at school with a concert and speeches. His Excellency the Governor himself presented finely printed leaving certificates and the publicity attending these ceremonies completely overcame the reluctance of the people in the villages to receive back the cured patients.

Publicity for the Department and health education generally was considerably assisted during the year by Radio Sarawak, which broadcast twice weekly health talks in vernacular languages. It is difficult to assess what notice is taken of such broadcasts, but there is good reason to suppose that the health talks have been well received. In one country area where a Development Officer had for more than a year been trying to persuade the people that beri-beri was caused by eating over-polished rice, they took no notice of him until one day they heard the same advice on the radio, when they came to him in surprise and said "Tuan, you were right all the time; the radio says so".

BRITISH RED CROSS SOCIETY: SARAWAK BRANCH

The Branch was honoured by the bestowal of an M.B.E. on the President who retired from Sarawak in July; Mrs. Kennedy had founded the Red Cross Society in Sarawak and been the main-spring of its activities throughout the last eight years.

Although the year 1954 saw many other unavoidable changes of office-bearers in the Branch and in the Kuching Division, the activities of the Red Cross in Sarawak continued uninterrupted and a great deal of useful work was done.

The Branch now has five Divisions at Kuching, Simanggang, Betong, Miri and Saratok. In each of these places the Red Cross undertakes the distribution of relief of those in distress. In addition to this case-work, the members provide clothing for the needy and milk for their small children; they visit the homes of the handicapped and undertake occupational therapy in the male and female blocks, the female mental block and in the children's ward of the General Hospital, Kuching; magazines and books are distributed to outstation hospitals; regular visits to the Leper Settlement were kept up and excellent work was done in the Settlement by an Associate Group, whose members are lepers. Work in Dayak villages around Kuching was continued and expanded.

In cases of major disaster, such as the complete destruction by fire of the bazaar at Buso near Kuching, the Red Cross did much useful work by the collection and distribution of clothing, cooking utensils, food and money for the relief of those who had lost their homes.

The training of Detachments continued with good results and members did duty as usual at such public functions as sports, race meetings and parades.

The Junior Red Cross continued to make good progress and the two Kuching links now number fifty-four junior members.

Both the Kuching and Miri Divisions ran an ambulance service throughout the year.

SOCIAL WELFARE

In Sarawak Social Welfare is divided into two parts; community development which is guided by a special committee, (see earlier references in this chapter) and social welfare which is the concern of the Social Welfare Council.

The work of this Council started by being confined almost entirely to the relief of destitution and suffering generally, and that is the way in which social welfare work in a country normally always begins, but gradually with the passage of time the Council has interested itself in other things, such as adult education, and, no doubt, its horizon will grow wider and wider. This is as it should be. Any organization, like any individual, should start small and gradually grow with experience, bearing more and more responsibility.

In Sarawak there is a unique experiment in progress in that Social Welfare is being administered without the formation of a separate Government department with all the overhead costs which that would involve.

The Social Welfare Council now meets on the third Monday in every month. There is an imposing membership list comprising all races and representing, as far as possible, all voluntary agencies in Sarawak, as for instance, the British Red Cross Society, ATAS (Anti Tuberculosis Association of Sarawak), the Sibu Benevolent Society, Churches, the Rotary Club and so on. There are also members appointed to represent other parts of Sarawak than Kuching and a few have been appointed as members for no special reason other than that they have a particular interest in social welfare work and have valuable knowledge to contribute to our deliberations. The income of the Council is about \$120,000.00 a year and in 1954 over \$130,000.00 was spent.

Although the Social Welfare Council is by no means the oldest of the welfare agencies in Sarawak, yet it has come to be in a way the parent body of all the others and they all look to it for financial and moral support. Many of them, such as the Sibu Benevolent Society, collect considerable funds independently of the Social Welfare Council, but they depend very

largely on the Council's financial support. This is true not only of central colony-wide agencies such as the Red Cross, but also of local organizations such as the Sarikei Benevolent Society and similar societies in other parts of the country. A particularly happy development of social welfare work in Sarawak during the past year or two has been the establishment all over the country at district level of small local committees which administer social welfare in their own districts. The form and constitution of these local committees vary enormously from place to place and this, of course, is as it should be. In Lundu for instance, the welfare committee is a special sub-committee of the Local Authority. In Lawas it is simply a small body under the chairmanship of the District Officer with a few prominent local men to assist him.

Whatever the form and constitution of these local committees, the work they do is the same, that is to say they administer social welfare, chiefly in the form of relief, to all kinds and conditions of men and women, whether their trouble was caused by some major catastrophe such as flood or fire or whether it was a more personal problem like tuberculosis or perhaps the imprisonment of the bread winner.

The Council's funds, however, are not solely devoted to the relief of poverty or distress although in 1954 some \$50,000 were directly so expended. During the year the Council approved grants of \$5,000 each to the Kuching Amateur Athletic Association and the Council of Adult Education to help these new ventures to get started. Sums amounting to \$14,000 were granted for the provision of maternity homes at Serian and Sarikei staffed by the Roman Catholic Mission, and \$30,000 were allocated to the Sibu Benevolent Society for the capital expansion of the society's facilities. \$7,000 were spent on sending two blind Dayak children to the Princess Elizabeth Home for the Blind in Johore and \$1,500 was allocated to enable two crippled children to obtain specialized treatment in Singapore—treatment which has proved eminently successful. Boys Clubs also received substantial grants during the year.

It will therefore be seen that the expansion of social welfare in all its forms is continuing year by year and there is no doubt that public interest in voluntary welfare work, whether it be in

in the relief of distress or in the more positive form of community development, is growing most satisfactorily. However as the Social Welfare Council has gradually developed, it has been found necessary to have some permanent trained officers. In October 1954, therefore, a trained social welfare officer was obtained from the U.K. by the Government, she is attached for convenience to the establishment of the Medical Department but does duty for the Social Welfare Council. It would probably be preferable if some trained local person with a knowledge of local languages and conditions were available for this post and the Government is therefore offering a scholarship for such training overseas.

X

LEGISLATION

DURING the year twenty-two Ordinances were enacted and the pattern of legislation in the Colony continued along the lines of reform and amendment characteristic of previous years.

Among the Ordinances enacted the following merit comment:—

NEW ORDINANCES ENACTED DURING THE YEAR

Land (Control of Sub-Division) Ordinance, 1954:

This Ordinance affords an interim stage in the progress towards detailed town planning envisaged by the Town and Country Planning Ordinance, 1952. It regulates the development of land by sub-division and makes provision for the reservation of land for roads, access-ways etc. This Ordinance at present applies only to the Kuching Municipal Area and the Sibuan Urban District Council Area. It follows therefore that no land under the jurisdiction of the Kuching Municipal Council and the Sibuan Urban District Council may be sub-divided except with the approval of the authority exercising control over the respective areas.

Water Supply Ordinance, 1954:

An Ordinance to provide for control and regulation of water supply in order to prevent waste and contamination.

Japanese Treaty of Peace Order, 1952 (Adaption) Ordinance, 1954:

This Ordinance is to make provision for adapting the Japanese Treaty of Peace Order, 1952, to the circumstances of the Colony of Sarawak.

Muslim (Titles and Construction) Ordinance, 1954:

An Ordinance to provide for the change of the word "Muslim" or "Islam" for the word "Mohammedan" in any written

law in force in the Colony so as to conform with the terminology used in other territories, and to make necessary consequential provisions thereon.

Majlis Islam (Incorporation) Ordinance, 1954:

An Ordinance to provide for the establishment of a Council of Religion and Malay custom to be known as Majlis Islam of Sarawak to administer and manage Muslim religious affairs in the Colony; and for the establishment of a Legal Committee, which is an ancillary body of the Majlis Islam, to determine questions of Muslim law or doctrine or Malay Customary law of the Colony. The Ordinance also makes provisions covering the procedure to be adopted by the Majlis Islam and the Legal Committee in the conduct of their business, their powers and duties.

National Parks Ordinance, 1954:

This Ordinance provides for the constitution, maintenance and control of National Parks for the enjoyment of the general public and also an nature reserves. Such National Parks shall be managed by Boards of Management, under the general direction of a body to be called the Sarawak National Parks Trustees on which there will be representatives of Council Negri.

ORDINANCES WHICH REPEAL AND REPLACE EXISTING ORDINANCES

Muslim Converts (Property) Ordinance, 1954:

This Ordinance is designed to repeal and replace the Moham-medan Converts (Property) Ordinance—Cap. 82, but contains no new departure in policy save that unlike its predecessor it regulates the conversion to the religion of Islam of infants and provides for the registration of conversions.

Constabulary Ordinance, 1954:

This Ordinance repeals and replaces the existing Ordinance with more comprehensive enactment similar to that in other territories, but most of the provisions of the existing Ordinance find a place in the Ordinance though on occasion there are modifications of form or additional provisions.



Dr. D. H. Nibbet

Potter at work at Pulau Kerto, near Sibul.

Malay boys at play,
Santubong.



AMENDING ORDINANCES

Women and Girls' Protection (Amendment) Ordinance, 1954:

The Principal Ordinance has been amended in order to protect common prostitutes and women of known immoral character in relation to the offences of procuration, so that they could share that protection in relation to the offences which is afforded to the more innocent members of their sex.

Land Classification (Amendment) Ordinance, 1954:

To enable a person who is by race a non-native, but who by every test of personal law is a member of a native community, to acquire rights in Native Area, Native Customary or Interior Area Land; to establish a permit system, which will enable non-natives to occupy Native Area and Native Customary Land under permit; and to prohibit native customary rights from being created whenever any Native Area or Interior Area Land is declared to be Mixed Zone Land or whenever any unalienated Mixed Zone Land is declared to be Native Area Land.

Pensions (Amendment) Ordinance, 1954:

To provide for the payment to the legal personal representative of an officer who dies while in service or shortly after retirement of a gratuity not exceeding either his annual pensionable emoluments or his commuted pension grantuity, whichever was greater; and to make provision for the payment to the estate of an officer on pension who dies shortly after retirement of the difference between his annual pensionable emoluments and any payments already made by way of pension or gratuity.

Crown Agents (Change of Title) Ordinance, 1954:

This Ordinance provided for the change of title of the "Crown agents for the Colonies" to that of the "Crown agents for Oversea Governments".

Interpretation (Amendment) Ordinance, 1954:

To add further definitions and to effect minor amendments in the Interpretation Ordinance, 1953, which have been found to be desirable.

Post Office (Amendment) Ordinance, 1954:

This Ordinance has been amended to enable the Postmaster-General, with the approval of the Governor in Council, to prescribe any reduced rates of postage for member of Her Majesty's Forces.

Local Authority (Amendment) Ordinance, 1954:

To make provision for the application of by-laws and regulations of a Local Authority to any extension of the area of the Local Authority; and to clarify the scope of section 46.

Entertainment Duty (Amendment) Ordinance, 1954:

To remedy a number of defects in the Principal Ordinance; to define with greater exactitude the nature of the duty leviable upon entertainments, the character of those entertainments which should be exempt from payment of duty and the powers available to those concerned in the enforcement of the Ordinance.

Natural Resources (Amendment) Ordinance, 1954:

To increase the number of members of the Natural Resources Board and to provide for unofficial representation thereon.

Electricity (Amendment) Ordinance, 1954:

Although the bringing into operation of the Electricity Ordinance, 1952, has been delayed, this Ordinance will enable the Electricity Ordinance, 1952, to be brought into force in part. It acts as an interim measure so that licences may be lawfully granted to persons who are anxious to supply electricity in areas where the Sarawak Electricity Supply Company does not operate.

Kuching Municipal (Amendment) Ordinance, 1954:

To extend the period of the repayment of a Government loan to the Municipal Council from forty years to sixty years. This was consequential to the proposed grant of a Government loan for sixty years to the Council to carry out the Kuching Housing Scheme.

XI

LAW AND ORDER

JUSTICE

A PART from Imperial legislation, whether by Order in Council or otherwise, the law of Sarawak is to be found mainly in local ordinances and native customary law. Chinese customary law, chiefly in matrimonial matters and in relation to inheritance is recognised to a limited extent, but only insofar as such recognition is expressly or by implication to be found in a local ordinance.

Where Sarawak law is silent, the Courts apply the common law of England and the doctrines of equity, together with English statutes to the extent permitted by the Application of Laws Ordinance, 1949. But English law is applied so far only as the circumstances of the Colony and of its inhabitants permit and subject to such qualifications as local circumstances and native custom render necessary.

The Supreme Court

On the 1st December, 1951, the Sarawak, North Borneo and Brunei (Courts) Order in Council, 1951, came into force. This order in Council established one Supreme Court of Judicature, consisting of a High Court and a Court of Appeal, for the Colonies of Sarawak and North Borneo and the State of Brunei. The Court of Appeal has its headquarters in Kuching, but sits as occasion may require in other places of Sarawak, North Borneo and Brunei.

The present disposition of the judges is as follows: the Chief Justice at Kuching, the Senior Puisne Judge at Jesselton, North Borneo, and three other Puisne Judges, one at Kuching, another at Sibü while one judge is usually absent on leave.

During the year 331 criminal cases and 224 civil actions were heard in the High Court as compared with 163 criminal cases and 350 civil actions in 1953. In the Court of Appeal 21 criminal appeals and 9 civil appeals were heard as compared with 19 criminal appeals and 25 civil appeals in 1953.

The Lower Courts

The Courts presided over by magistrates are the District Court (Civil and Criminal); the Court of Small Causes (Civil); the Police Court (Criminal); and the Petty Court (Civil and Criminal). Apart from one legally qualified magistrate who sits at Kuching the remainder are administrative officers who do magisterial work as part of their duties. There is a vacancy for another legally qualified magistrate but efforts to recruit a suitable person have so far been unsuccessful. There are three men from Sarawak now acquiring legal qualification in England; one is due to return in 1956, the second in 1957 and the third in 1958.

On the 1st May, 1952, a new Courts Ordinance came into force. In the exercise of their civil jurisdiction Courts of Magistrates have jurisdiction in every civil matter whereof the value in dispute does not exceed in the case of the Magistrates of the First Class five hundred dollars or, where the Chief Justice by notification in the *Government Gazette* confers upon any magistrate special jurisdiction, then in a Court presided over by such magistrate one thousand dollars; in the case of the Magistrates of the Second Class two hundred and fifty dollars; and in the case of the Magistrates of the Third Class fifty dollars. Courts of Magistrates have no jurisdiction in proceedings in connection with application for partition of immovable property, the specific performance or rescission of contracts, the cancellation or rectification of instruments, the enforcement of trusts, and in connection with application for declaratory decrees. In the exercise of their criminal jurisdiction the powers of the Courts of Magistrates are as provided in the Criminal Procedure Code.

Apart from the Courts mentioned in the preceding paragraph there are the Native Courts constituted under the Native Courts Ordinance. These are the District Native Court, the Native Officer's or Chief's Court and the Headman's Court. An appeal lies from the District Native Court to the Court of a Magistrate

of the First Class sitting with a Native Officer or Chief and two assessors. There is a further appeal to the Supreme Court, in which the Judge sits with the Secretary for Native Affairs (or with a First Class Magistrate other than the Magistrate from whose Court the appeal lay) and with two assessors who must be Native Officers or Chiefs. As a general rule the Native Courts are competent to try only cases in which all the parties are natives, including cases arising from the breach of native law and custom, civil cases where the value of the subject matter does not exceed fifty dollars and claims to untitled land.

A comparison of the figures of cases tried in the lower Courts in 1953 and 1954 shows that there is little change. The incidence of crime, particularly serious crime, fortunately remains low.

There has been no important change in the organisation of the Supreme Court during the year.

Probate and administration

In pursuance of the powers conferred upon him by section 3 of the Administration of Estates Ordinance (Cap. 80), the Registrar assumed official administration of twelve deceased persons' estates.

Two estates of considerable value were dealt with during the year. The aggregate estate duty and interest collected on these estates alone came to \$207,300.00.

The total estate duty and interest collected during the year amounted to about \$257,000.00. This compares with a figure of \$98,000.00 for 1953 and \$47,000.00 for 1952.

Twelve grants of Probate, fifty grants of Letters of Administration, and one Certificate of transmission were issued during the year.

Lunatic persons' estates

In his capacity as Official Assignee, the Registrar administered five lunatic persons' estates. Two of them were Chinese, two Dayak and one Malay.

Bankruptcy

There has been a tendency by creditors to resort to bankruptcy proceedings as an effective method of obtaining payment from their debtors with the result that a number of receiving orders and adjudication orders were made. All except two of the bankruptcy proceedings were later annulled upon the debtors settling the claims of the petitioning creditors.

Deeds and Bills of Sale

About five hundred and thirty documents were registered under the provisions of the Registration of Deeds Ordinance (Cap. 89), an increase of about two hundred over those of last year. The majority of these were hire purchase agreements, and powers of attorney.

About fifty bills of sale were registered under the provisions of the Bills of Sale Ordinance (No. 7 of 1949).

Business Names and Limited Companies

Twenty new partnership businesses were registered during the year as against forty-three in 1953. The majority of these were dealers in general merchandise and groceries.

Eight locally incorporated and eight foreign limited liability companies were registered under the Companies Ordinance. The majority of these are traders in general merchandise and insurance companies. A motor vehicle transport company and a theatre company have also been registered.

Towards the end of the year, owing to the increase in Trades Licence fees, many firms, registered under the Business Names Ordinance, applied for cancellation of registration or alteration in the nature of their business. Several new local incorporated limited companies were registered during this period.

Patents and Trade Marks

Four grants of "Exclusive Privileges" were issued during the year. All of these were United Kingdom patents.

One hundred and forty-two trade marks were registered and four renewals of registration effected.

Trust

In the absence of a public trustee in the Colony the Registrar administers two trust estates by order of the Courts.

Court Fees, Fines, Forfeitures and Deposits

The volume of transactions under this heading has increased considerably. The revenue collected during the year decreased, amounting to \$41,899.80 as compared with \$46,716.62 for 1953 and \$31,477.98 for 1952.

Money Lenders

There are now twenty-eight Money Lenders on the Register. Fifteen of these are new registrations.

CONSTABULARY

Reorganisation has gone forward on a wide scale throughout all branches of the Force and progress, although slow, has been steady. Although the older members of the rank and file have found the assimilation of new system and methods difficult, morale has definitely improved and there has been a refreshing increase in the number of reports by police officers of attempted bribery. Peaceful conditions throughout the Colony have permitted a steady programme of re-training, for which firm foundations have now been laid. There is no reason why the now adequate establishment of Gazetted Officers and Inspectors should not rebuild the force into an effective and efficient unit. Inexperience will be a handicap for some time to come. 40 Inspectors and 545 Police Constables have been recruited and trained in the last two years, leaving a shortage of older men. A further period must elapse before a balanced strength can be achieved.

Strength and Distribution

The total strength of the force at the end of the year was 34 Gazetted Officers, 79 Inspectors and 1,362 Other Ranks; this

was below establishment by 5 Gazetted Officers, 2 Inspectors and 29 Rank and File. 28 Probationary Inspectors were appointed and spent most of 1954 under training in Malaya.

Special Branch

The Special Branch was further expanded and properly constituted units were established in Kuching, Simanggang, Sibul, Miri, and Kuala Belait in the State of Brunei. All except one are under the command of Gazetted Officers. The incidence of serious crime is low and the Special Branch can, therefore, handle criminal investigations as well as the collection of political intelligence. The acute shortage of Chinese or Chinese speaking detectives is still a grave handicap. Specialised training was made available in Malaya for 16 Inspectors and 24 Other Ranks.

The Field Force

Five Field Force Platoons have now been raised and three of them have completed their training. The proposal to recruit a sixth Platoon has been abandoned for the present. The first Platoon was posted to Kuala Belait at the end of 1953 and a second Platoon was established in a new camp in Miri. Completion of the Sibul camp was held up by bad weather and it will not be occupied before February 1955. The fourth Platoon of Land Dayaks and the fifth Platoon of Kenyahs, and Kelabits were still under training at Field Force H.Q. in Kuching at the end of the year. The efficiency and morale of all ranks is excellent; varied forms of training and education have been introduced and the men themselves are keen to learn and to better themselves. Occasional demonstrations of jungle fighting have been provided for distinguished visitors and are much enjoyed by the participants. The whole unit is in excellent shape and is a most valuable addition to the force.

Marine Branch

Both police launches were completely overhauled in 1954 and the P.M.L. "MARGHERITA" was converted to single screw. One aluminium speedboat was ordered from Hong Kong. Twelve outboard police boats were under construction at the Brooke Dockyard and one aluminium boat has been sent to Sibul for test. Patrols can be extended throughout the Colony when all craft are in commission.

The Police Barracks at Lubok Antu. Bukit Besai (2543 feet) in the background, is on the border between Sarawak and Indonesia.



Abg. Haji Husaini bin Datu Dol

Malay members of the Sarawak Constabulary taking part in the procession on the celebration of the birthday of Prophet Mohammed.



Radio Branch

Little material progress has been made, as the delivery of new equipment was badly delayed by the dockworkers' strike in England. Two pack sets for patrol use have been tested with satisfactory results, and a number have been ordered. One Inspector and two N.C.Os have passed through a special course of radio instruction in Malaya and Singapore.

Transport Section

The transport position is now satisfactory. Fifteen new vehicles, made up of six Land Rovers, seven Commer Heavy-Duty Pick-ups, one Commer Prisoner Van and one Austin Truck, were received and put into commission. Six drivers were trained in Singapore and further men will be trained locally in the near future.

The Band

The Band gave regular public performances throughout the Colony and in Brunei. A bugle band has also been formed. All bandsmen have now been trained in First Aid.

The Auxiliary Police

The Auxiliary Police have maintained a regular schedule of parades and instruction and have shown commendable keenness. It has been necessary on two occasions to call on the Auxiliary Police to assist the Regular Force.

Training and Education

One Acting Assistant Superintendent was sent for six months' training at Ryton Police College, and three other Gazetted Officers underwent C.I.D. Courses while on leave in the United Kingdom. A regular programme of refresher courses has been maintained and a short period of training with the Field Force has been introduced. The Director of Education kindly supplied a member of his Department to overhaul the teaching methods employed at the Training School. Great improvements have already been effected in the methods of educating illiterate recruits. Members of the Field Force have also shown commendable keenness and at their own request now attend special

classes of instruction. Illiteracy is a serious problem but the application of modern teaching methods at the Police Training School and regular educational classes, which will soon be conducted by Inspectors in all main Police Stations, will gradually produce results.

Welfare

Welfare arrangements are generally satisfactory and sports gear of all kinds is provided. The Brunei Government generously presented a billiard table to the Police Training School Canteen. Radio sets have been issued to most stations and recreation rooms are included in all new buildings.

Casualties

Casualties totalled 150 men, compared with 174 last year. 44 men were dismissed for disciplinary offences, 51 resigned, 10 were discharged on medical grounds, 28 retired on pension and 15 men were discharged as unlikely to become efficient. There was one death and one desertion. The casualty rate is still high for a small Force and is not likely to decrease for some time to come.

Buildings

The new Divisional Headquarters at Sibu was occupied in the early part of the year and a new headquarter building has been completed at Miri. The new Miri Police Station will soon be ready for occupation. District stations at Bau and Serian are also nearing completion. The Field Force camp at Miri is now occupied and the Sibu camp will soon be in use; work on the latter has been delayed by serious floods. A number of Junior Service quarters and barracks for married members of the rank and file have also been built in various parts of the Colony. Shortage of quarters for married men is still acute and many more quarters are required to complete the programme.

Health

Health is generally good. Minor cases treated at various Police Dispensaries total 3,321. 213 men were admitted to hospital resulting in a loss of 1,174 man-days.

Uniform and Equipment

A re-equipment programme for the force is now nearing completion. The new grey shirts have been issued to all members of the rank and file and reasonable stocks of all types of stores are now available.

Traffic

Traffic congestion in the Kuching area is a serious problem. The roads are generally too narrow to carry the flow of traffic which is increasing steadily as more and more new vehicles arrive in the country. Regular traffic police patrols have reduced the accident rate in the First Division, but accidents have increased over 1953 in both Sibü and Miri. There were 124 road accidents in Kuching, 53 in Sibü and 51 in Miri. Five persons were killed, 21 severely injured and 78 slightly injured.

Crime

There was a slight decrease in the more serious types of crime, although miscellaneous seizable offences rose from 40 in 1953 to 319 in 1954. Murder cases dropped from 10 to 8, robbery from 5 to 2, theft from buildings from 486 to 330, extortion from 4 to 1, and suicide from 20 to 12. Criminal house trespass rose from 33 to 75 and theft from 504 to 516. Non-seizable offences dropped from 6,426 to 6,030.

Alien Registration

The total number of Aliens registered in 1954 was as follows:—

Americans	2
Austrians	1
Chinese	362
Dutch	50
Germans	1
Indonesians	423
Italians	1
Japanese	1
Filipinos	1
Stateless	1
	<hr/>
	843
	<hr/>

The total number of registered aliens in Sarawak at 31.12.54 was 5,198.

Details of cases reported to and dealt with by the police in 1954 are included in Appendix B.

PRISONS

The total number of prisoners committed during 1954 was 325 as compared with 411 in 1953. Seven female prisoners were committed during the year. Recidivism was somewhat lower than in the past; there were in fact 18 cases compared with 27 in 1953. Out of a total of 125 prisoners still serving sentences at the end of the year, 12 were recidivists.

Discipline of the prisoners remained good throughout the year. No serious offences were committed and all minor offences were dealt with by the Superintendent or by the Deputy Superintendent. Three male prisoners escaped, two from Bau prison and one from Batu Lintang Camp. The latter was re-arrested within two hours but one of those who escaped from Bau was still at large at the end of the year. One prisoner was executed at the jail in 1954.

The health of the prisoners was good, no serious case of sickness being reported during the year. This may be in part due to the introduction into the diet of semi-polished local rice in place of the usual imported rice. The small prison hospital at the Kuching prison continued to serve its purpose well; minor cases were all treated there.

Trade parties at present include the following:— basket-making and reseating of chairs, roller-blatt making, tinsmithing, blacksmithing, carpentry, laundry, tailoring and building. In addition to these, an external working party was detailed to work on tree-felling at the Kuching airport. Trusted prisoners were also sent to work at the Astana and other Government compounds.

It is still difficult to segregate first offenders from habitual criminals, but a new open prison camp is now being erected near the Pending road and, when it is completed, some selected first offenders will be housed there. Considerable improvement was made to the Prison buildings and staff quarters during 1954.

Recreational facilities for prisoners include badminton, table-tennis, chess and draughts. Radio reception is available and the programmes from Radio Sarawak are always popular. The

library contains literature in English, Chinese and Malay and is well patronized. Fortnightly cinema shows were given in the Kuching prison by the Government Information Service and were greatly appreciated.

Prisoners of the Anglican or Roman Catholic faith were visited by their ministers. Officials of the Judiciary and prominent members of the public visited the prison during the year, while the Board of Visitors made regular visits and reported favourably on the gradual improvement to the buildings.

The total revenue for the year was \$46,936.76 compared with \$43,334.20 in 1953. The value of articles manufactured by the prison industries was \$82,649.36 compared with \$65,827.00 in 1953.

A new Prison Ordinance and new Prison Rules are in course of preparation.

The prison staff is still under strength since the recruitment of the right type of individual is difficult. During 1954 six warders resigned and one retired on pension; in their place one Malay, four Dayaks and one Indonesian were enrolled. New recruits were trained by a Grade I Warder who completed his training course in Taiping.

The Superintendent of Prisons represented Sarawak and Brunei at a United Nations Seminar on the Prevention of Crime and the Treatment of Offenders in Asia and the Far East, which was held at Rangoon in October.

XII

PUBLIC UTILITIES AND PUBLIC WORKS

WATER SUPPLIES

Kuching

A GRAVITY supply is obtained from a series of intakes in the Matang range about 10 miles from the town, feeding into two service tanks with a total capacity of 3,600,000 gallons. The number of active connections was 2,730. Owing to well distributed rainfall throughout the year, the average daily supply increased by about 45% to 1,629,800 gallons. The quantity available varies from 500,000 gallons per day under dry conditions to a maximum of 2,000,000 gallons per day. Even under the most favourable conditions, hours of supply have to be restricted for the bulk of consumers; there was however, during 1954 no recurrence of serious shortage caused by prolonged drought as happened in 1953.

Renewals to the gravity supply mains system continued throughout the year and a long term programme of improvements to the town distribution system was commenced.

Progress on the scheme for a new pumped supply from the Sarawak River at Batu Kitang was mainly of a preparatory nature. Site levelling and access for the waterworks buildings was completed and staff quarters built. Pipe laying was started for the 11 mile pumping main of 20" diameter. Tenders were called for the civil engineering construction subcontract.

A new water supply Ordinance was enacted during the year.

Sibu

The waterworks are situated at Bukit Lima on the Rejang River about 1¾ miles above the town.

The supply is pumped from the river to a purification plant and from there to a high level water tank of 76,000 gallons

capacity. The number of connections increased by 11% to 1,030, with an average daily consumption of 450,000 gallons. Demand greatly exceeds output and interim extensions were started which will increase treatment capacity by half and double the storage capacity.

Sarikei and Binatang

A scheme was prepared for a joint supply to these towns pumped from a common intake on the Rejang River; however, owing to the high cost and difficulties of operating this project, trial borings were made at each town, and the results were sufficiently promising to warrant further development of this alternative scheme for separate borehole supplies. Trial bores were also made at the new Customs area at Rejang, near Tanjong Mani.

Mukah

A new supply was put into operation. Water from the Petanak River is dosed with coagulants and pumped 2 miles to the treatment plant where it is clarified and fed into a high level storage tank of 58,000 gallons capacity. The water is particularly difficult to treat successfully and is still somewhat unpalatable to the taste. Experiments are continuing with the assistance of experts from the World Health Organisation. Average daily consumption was 80,000 gallons with 96 connections.

Miri

The town is supplied from the Sarawak Oilfields Limited system, distribution being undertaken by Government. Average daily consumption was 180,000 gallons. Fittings for an extension of the distribution system began to arrive at the end of the year.

A small separate Government supply serves the Tanjong Lobang and Brighton residential areas. These areas will eventually be merged with the main scheme.

Other Supplies

Gravity installations are in operation at Bau, Simunjan, Bintulu and Limbang.

Renewal of the supply main at Simunjan was started. At Limbang a booster pump has been installed to increase the supply during dry periods and extensions were made to the distribution system. A scheme for a piped supply at Lawas was prepared.

GAS

Miri

A supply of natural gas is available from the Oilfields at Seria.

A mains distribution system was completed and a total of 280 connections were in service at the end of the year. Mains pressure has to be reduced considerably for domestic use and a suitable meter has not yet been obtained.

ELECTRICITY

Public Electricity Supplies are provided by the Sarawak Electricity Supply Company Limited which is owned by Government and managed on their behalf by Messrs. United Engineers Ltd. of Singapore.

The supply at Kuching and Sibü and at new stations is A.C.. Elsewhere it is still D.C. and at minor stations a service is only available during the hours of darkness.

Extensions were made or in progress at Kuching and Sibü and a new station opened at Serian.

The installed generating capacities at the end of the year were:—

1st Division	Kuching	2,328 KVA	AC
	Bau	31.5 KVA	AC
	10th Mile Bazaar,		
	Serian Road	16.5 KVA	AC
2nd Division	Serian	21.9 KVA	AC
	Simanggang	50 KW	DC
	Betong	25 KW	DC
3rd Division	Sibü Bukit Lima	63 KVA	AC
	Sibü Town	512 KVA	AC
	Sarikei	72 KW	DC
	Binatang	43 KW	DC
	Kanowit	31.5 KVA	AC
	Mukah	47 KW	DC
4th Division	Miri Town	380 KW	DC
	Miri Hospital Area	63 KVA	AC
	Bintulu	44 KW	DC
	Marudi	31.5 KVA	AC
5th Division	Limbang	31.5 KVA	AC

The total units generated at all stations during 1954 was 6,798,000 an increase of 18%. Consumers numbered 5,455 an increase of 29%.

BROOKE DOCKYARD AND ENGINEERING WORKS

The Brooke Dockyard and Engineering Works at Kuching is an establishment operated under the control of a Board of Management appointed by Government and including commercial representation.

A number of minor structural improvements were made as the start of a programme of modernisation and extension.

There is a dry dock 240' x 40' and vessels up to 9' draught can be docked at spring tides. Adjacent to it is a slipway which can take launches up to 40' in length and 13' beam. The machine shop is equipped to deal with repairs to the hulls and machinery of vessels and general engineering work.

During the year 55 vessels of an aggregate tonnage of 6,385 tons were drydocked and 22 launches slipped for repairs. Six river patrol boats were built, two vessels fitted out for sea duties and a lighter converted to an oil barge.

PUBLIC WORKS

The abnormally heavy rainfall which persisted throughout the year hampered construction, particularly road works. A Government Architect was appointed and additional Development staff were recruited. The lack of properly trained technical assistants continues to be a major problem in the supervision of works. Building costs generally remained steady with a slight tendency to fall in some areas towards the end of the year. Tendering for contracts became more keen.

In Kuching the new block of government offices was opened. This is a two storey reinforced concrete building designed to be made a third storey in the future. It is airconditioned throughout. Two three-storey blocks with outbuildings for twelve Senior Service flats and a new two-storey house for the Chief Secretary were completed and occupied. Work was started on an additional building for the Sarawak Museum. The design and supervision of all these buildings was undertaken by a Singapore firm of Architects.

Service quarters and accommodation completed or in progress of construction throughout the Colony included sixteen Senior Service quarters, one hundred and sixty-eight Junior Service quarters and seven barracks. A block of six Senior Service flats was nearing completion at Sibü and one of twelve for women employees was in progress at Kuching. Site works were started for ten blocks of Junior Service flats in Kuching to accommodate sixty families. Improvements or extensions were made to the Rest Houses at Kuching and Miri.

A new block of Government offices at Mukah was nearly completed by the end of the year, a wing was added to those at Miri and an extension made to the Bintulu office.

The new Health Centre was opened in Kuching, and a programme of extensions at Kuching hospitals including additional junior staff accommodation and other improvements was started. Further accommodation was built at the Leper Settlement. Three new dispensaries were built and two enlarged.

A police Field Force camp was completed at Miri, and one was under construction at Sibü. Divisional headquarters and a town police station were also completed at Miri; a district police station was built at Sarikei and police stations were under construction at Serian and Bau.

New automatic telephone exchanges were started in Kuching, Sibü and Miri, and radio telephone headquarters buildings were completed at Simanggang, Sibü and Miri.

Broadcasting House and the ancillary transmitting and receiving stations in Kuching were completed and came into operation.

A Customs import godown was completed at Kuching as were double-storey Customs offices and godown buildings at Sibü and Miri. A Customs station including a godown, office and staff accommodation was started at Rejang.

Work continued on new bazaar sites at various places.

The Ban Hock Wharf at Kuching was redecked, the Bukit Biawak oil jetty completed and the Sungei Merah oil wharf at Sibü extended. Tenders were accepted for the new wharf and

river wall at Sibu. These have been designed by consultants who will also supervise the wharf construction. The second section of the concrete pontoon wharf was installed at Sarikei. The Marudi wharf was extended and a launch wharf built at Niah. Timber river walling was built at Bintulu and land reclaimed there.

Good progress was made on the widening and deepening of the Sungei Kut to form a canal. A new and larger dredger was obtained and started work towards the end of the year.

XIII

COMMUNICATIONS

WATER

ALTHOUGH development plans include the extension of the limited roadways throughout the country, the principal means of transport and communication for many years to come will continue to be by sea and river.

Coastal and Local Services

The Sarawak Steamship Co. continued their weekly service between Kuching and Singapore and also maintained coastal services with the vessels Meluan, Timbali, Ong Tiang Swee and Margaret. A replacement for S.S. Meluan was launched in Penang in November and the prospects are that this new motor vessel "Rejang" will come into service at the end of April 1955. M.V. Dido was sold to this company by the Government and has been used mainly as a feeder vessel from sawmills in various parts of the country to ocean carriers at Tanjong Mani.

There seems to be a shortage of suitable shallow draft shipping to cater for this lifting of cargo from sawmills, some of which are in positions difficult of access.

Chinese coastal and river craft continued to ply between river and coastal ports and a few new locally built wooden vessels made their appearance during the year.

The Hua Siang Shipping Company's "Hua Heng" made a few trips from Singapore to Kuching and Rejang Ports and the owners propose keeping this vessel and their "Hua Li" on the Singapore—Sarawak run.

Oversea Services

The Straits Steamship Co. Ltd. maintained their usual services.

There was a further increase in ocean-going shipping at both Tanjong Mani and Kuching but the tonnage at Miri dropped slightly.

The Norwegian vessels "Henrik" and "Hervar" continued to give a monthly service to Hong Kong via North Borneo coastal ports and they now call at Sibü if there is inducement.

There have been many inquiries regarding frieght for ocean-going vessels calling at Batang Lupa. The M.V. Arnhem chartered by Sarawak Steamship Co., has picked up one or two cargoes there, and it is hoped to see larger vessels loading here in 1955. This connection would probably be with Hong Kong.

Direct shipments of rice continued to arrive from both Bangkok and Rangoon.

Government Owned Craft

M.V. Zahora came into commission at the end of August as H.E. the Governor's yacht and despatch vessel.

M.L. Chamois was condemned by a board of survey and destroyed.

Demands on all other launches have been heavy and will continue to be so, one important reason for this being the fitting, maintenance and fuelling of outlying radio-telephone stations.

M.Vs. Taffy, Binnie and Lucile were used from August onwards to carry stone from Sebuyau to Sibü.

Casualties

A number of local craft were lost or damaged through stranding or collision on various parts of the coast during the year and in a few cases the captains were prosecuted for rash navigation. Most of these accidents were caused by lack of basic knowledge of seamanship and of the rules for preventing collisions at sea; it is hoped eventually to admit other captains to the navigation school started during the year for Government marine staff.

Navigational Aids

The loss of the lighthouse tender "Heartsease" in December last year handicapped the activity of the Buoys & Lights and

Navigational Aids branch. A new tender is due for delivery in April 1955 and this will be employed on making up the large backlog of work.

A site was arranged for a replacement of Tanjong Datu light and a pathway cleared up the hill. It is hoped to erect this light in 1955.

New sets of transit towers were erected at Tanjong Embang and Kampong Senari in the Kuching River and were most favourably reported on by all shipmasters using the river. The outer set is in course of having electric flashing lights fitted to replace the fixed oil lights and later the Senari light will be similarly fitted.

A buoy similar to that laid at Kuala Lawas last year was laid at Kuala Limbang in September and is proving very useful.

During a storm in December, Loba Ketan beacon and North Jerijeh beacon were both blown down. The former has been temporarily replaced and a steel tower 75' high is scheduled to be erected in 1955.

Visits of Naval Vessels

Kuching was visited in March 1954 by H.M.S. Alert, in June by H.M.S. Cardigan Bay and in December by H.M.S. Consort which because of her length and draft had to remain at Pending.

H.M.S. Modeste visited the Rejang river in June and H.M.M.S. Pelandok visited both Sibuluan and Kuching in early May.

In September another call was made at Kuching by H.M.M.S. Pelandok and two harbour defence motor launches and various exercises were held.

TOTAL DEEP SEA TONNAGE 1954

	<i>Inwards</i>	<i>Outwards</i>
Rejang River	428,350	418,729
Kuching	91,224	89,870
Miri	2,388,471	2,387,413*
	<hr/>	<hr/>
Total	2,908,045	2,896,012
	<hr/>	<hr/>

* Including Tanker Tonnage

TOTAL COASTWISE TONNAGE

Kuching	98,251	103,309
Simanggang	11,224	10,999
Sibu	41,716	42,717
Mukah	11,565	13,053
Bintulu	36,381	35,017
Miri	34,583	35,673
Limbang	4,120	3,824
Total	<u>237,840</u>	<u>244,592</u>

TELECOMMUNICATIONS

The year 1954 showed the beginning of practical results from planning commenced in 1952 when about \$8,000,000 was allocated for development.

Rapid progress was made towards the installation of an automatic telephone exchange in Kuching and this should be in operation by the middle of 1955.

By the end of 1954 preparations for a smaller automatic exchange at Sibu, planned for 1955, were well advanced and a new exchange building had been almost completed.

A new manual exchange was opened at Miri in August 1954.

Materials and equipment were purchased during the year for rebuilding and developing the telephone systems in outstations throughout Sarawak with a view to linking them into the V.H.F. junction scheme. This provides for single channel links between about sixty places and their divisional headquarters. By December 1954 ten stations in the First Division had been thus brought into public service, but first class service cannot be expected until the old cables and exchange in Kuching have been replaced by the new automatic exchange already mentioned. A start has been made to install stations in the Second and Fifth Divisions, while in Miri the new building is well advanced and equipment has started to arrive.



The Royal Air Force dropping supplies by parachute to Sarawak Rangers (exercise at Kuching Air Day, September, 1954).

The crew of Motor Launch No. 3502 of the Royal Malaysian Navy at Kuching, on the eightieth birthday of His Highness the Rajah, on 26th September, 1954.



Discussions took place during the year regarding a multi-channel V.H.F. scheme designed to give communication between the various Divisions of Sarawak and Brunei and possibly North Borneo. Although the money for this scheme has been provided, it will be impossible to plan a suitable system until an experimental survey of possible radio links has been completed. This survey is now in progress. Meanwhile a telegraph service between stations in Sarawak and to Brunei, North Borneo and Singapore was maintained by H.F. radio.

Aeradio services at Kuching and Sibulairfields were staffed and maintained under contract by International Aeradio Limited. The radio service at Lutong (Miri) airfield, which was opened to commercial aircraft in 1954 was installed and maintained by Departmental staff.

The Sarawak Constabulary has its own radio network.

AIR

The development and expansion of civil aviation continued during 1954. In particular the year will be remembered for the introduction of the first commercial scheduled air service to Miri, linking that town by direct route to Brunei State and North Borneo.

There was another important innovation in November when Tourist Class air travel services were introduced on the Singapore—Borneo routes flown by Messrs. Malayan Airways Ltd. This cheaper service was welcomed.

Interest in the use of aviation for the development of the country continues to be stimulated by the varied projects that have been carried out. The Medical Department's anti malarial work in the Baram region, the Geological Survey's reconnaissances of the Hose Mountains and Upper Plieran region and the Agricultural Department's area fertilisation test, were helped by services provided by Royal Air Force aircraft. The aerial photographic survey continued during the year; weather was unfavourable to good results.

In order to provide a high standard of safety for air services operating through the territory, additional navigational and radio aids have been installed or have been provided for. Included in these services has been the installation of direction finding equipment at Sibu.

Ground services at the airports of Kuching and Sibu have also been strengthened by the formation of Civil Aviation Fire Service units and by the purchase of new fire and rescue equipment.

The permanent terminal buildings and control tower at Sibu were completed in February and opened by His Excellency the Governor.

Meteorological Service

The Sarawak Meteorological Service is a branch of the Department of Civil Aviation, and provides stations at Kuching, Bintulu and Miri.

Climatological and rainfall records are also received from forty rainfall reporting stations in the country.

Aerodromes

The following is a list of aerodromes established in Sarawak:—

International (Alternate) Airport:
Kuching.

Secondary Aerodromes:
Sibu, Lutong, Bintulu (under reconstruction).

Emergency Landing Grounds:
Trombol.

Light Aircraft strips:
Lawas, Long Semadoh, Bah Kelalan, Bareo, Lio Matu,
Long Tebangan, Long Atip.

Scheduled Air Services

The following air services were in operation by the end of 1954:—

(A) Regional Services:

Malayan Airways Ltd.

Singapore—Kuching—Sibu—Labuan (North Borneo)
—Five times weekly in each direction—1st Class
service—operated by D.C. 3 aircraft.

Singapore—Kuching—Sibu—Labuan—Once weekly
in each direction—Tourist class service—operated
by D.C. 3 aircraft.

(B) Internal Services:

Malayan Airways Ltd.

Labuan — Brunei — Anduki — Lutong (Miri) — Five
times weekly in each direction—operated by D.H.
Rapide aircraft.

Private Air Services

Frequent communication and aerial survey flights are carried
out in Sarawak by aircraft of the British Malayan Petroleum Ltd./
Sarawak Oilfields Ltd. air fleet of three Percival Prince aircraft,
two Short Sealand Amphibians and one Auster J.5 aircraft which
are based at Anduki in Brunei State.

The Borneo Evangelical Mission operating an Auster J.5 from
Lawas in the 5th Division Sarawak is also a frequent user of the
light aircraft landing strips in the interior.

SUMMARY OF AIRCRAFT MOVEMENTS DURING 1954

	<i>Kuching</i>	<i>Sibu</i>	<i>Lutong</i>
Aircraft movements	1,550 (1,234)*	1,228 (744)	130
Passengers uplifted	4,287 (3,276)	2,710 (1,764)	146
Passengers set down	4,418 (3,381)	2,829 (1,751)	133
Passengers in transit	4,319 (3,943)	5,202 (2,957)	—
Mail uplifted—lbs.	27,261	10,085	2,083
Mail set down—lbs.	29,905	11,691	2,287
Freight uplifted—lbs.	51,827	36,885	35
Freight set down—lbs.	159,178	70,502	624

*1954 in parenthesis

ROADS

The road system is confined to a few networks in and around the main centres of population. These are all situated on rivers or the coast and travel by water has long been regarded as the natural means of surface communication.

The distances and terrain make the building of trunk roads a major and costly operation and the climate and general unsuitability of local materials make a high and expensive standard of construction essential if the road is to give reasonable service.

Approximate road milages at present are:—

Hard surfaced	107
Gravelled or metalled	62
Dry weather earth roads	106
Dry weather jeep tracks	195

The Road Reconstruction programme was continued in the township and perimeter areas of Kuching, Sibü, Sarikei, Mukah, Miri and Bintulu as far as materials, plant and weather allowed.

Bau Road—15 Miles. Progress was severely hindered by bad weather. By the end of the year all but half a mile of the base course had been laid and ten and half miles of surfacing completed.

Serian-Simanggang Road—90 Miles. Draft contract documents and drawings were received from the engineering firm entrusted with the original survey. The clearing of the proposed road trace was started and 72 miles were completed. Alternative shorter routes at the Serian end were investigated and adopted; these are being surveyed departmentally and the necessary drawings prepared.

Quarries

The first year's working at the new Sebuyau granite quarry has indicated the lines on which major development might proceed. The pilot equipment and facilities have been inadequate to meet the demand for crushed and graded stone. A total of 7,400 cubic yards of stone was produced, of which 4,550 was shipped to the Third Division, the remainder being used on quarry works or in stockpile. Two powered lighters and four dumb barges were received, but so far it has only been possible to use the lighters.

ROAD TRANSPORT FACILITIES

Sarawak presents an unusual road transport problem. There are no main arteries connecting the major centres of population and therefore road transport plays a small part in the transport of the Colony.

The vehicle population has grown without regard for most of the basic principles of efficient and economic operation. Until 1954 the majority of the vehicles were passenger cars or light commercial chassis adapted by local operators to suit any purpose. Machines were overworked, overloaded, under maintained and lacked all major repair facilities. There were also more units than there was traffic offering and the result was an inefficient service with a high accident incidence charging exorbitant rates. The Road Traffic Ordinance, 1953 was designed to provide the control immediately necessary to restore the situation and included potential power for further regulation as the transport services expanded.

The year 1954 has seen the complete and accurate registration of all vehicles and trailers in private ownership. The licensing of drivers has been completely re-organised and a strict driving test has been introduced. Figures of driver and vehicle populations are still being collated and will not be ready for inclusion in this report. It is unlikely, however, that the total vehicle population in the country in private hands will exceed 3,000 with approximately 6,000 licensed drivers.

Co-incident with this, the Government initiated the reorganisation of the passenger transport services, commencing in the First Division. Some 280 locally built buses on passenger car chassis formerly enjoyed complete freedom of movement, demanded a maximum fare and represented a serious traffic problem. Their operators have now been formed into limited liability companies providing services over specified routes according to approved fare and time-tables. These operators have been required to purchase normal passenger buses according to specifications laid down. Approximately 40 x 25/30 seater units will provide an efficient and economical service in and around Kuching at slightly less than half the rate previously obtaining. This charge also includes a Government royalty. Naturally this complete

change has resulted in some difficulties and inconveniences during its early stages. Similar reorganization is planned in other divisions where the scope is much less due to the small extent and poor condition of the roads.

POSTS AND TELEGRAPHS

Regular external and internal mail services by air and sea were maintained throughout the year.

The air feeder service inaugurated in 1954 between Labuan and Miri has virtually brought Miri within the scope of the daily airmail service between Sarawak and Singapore.

Parcels are still conveyed mainly by sea, although an air parcel service has been introduced to Malaya and an extension of this service to the United Kingdom is being negotiated.

Parcels statistics are :—

	<i>Despatched</i>	<i>Received</i>
	\$	\$
1951	11,100	28,100
1952	14,280	32,376
1953	11,485	23,601
1954	13,133	28,319

The parcel mail service is popular for the import of a variety of merchandise, especially textiles. The parcels rate compares favourably with the cost of sea freight and the procedure for delivery is much simpler. Facilities have been improved by the opening of a Customs Office in the Post Office itself at Kuching so that dutiable parcels can be delivered without the complication of a visit to the usual Customs Offices. At Sibu a compromise in this respect has been arranged so that duty is collected by Post Office officials on behalf of the Customs Department. At Miri similar arrangements have been introduced to lessen inconvenience to the public.

Mails

A "Cash-on-Delivery" service from Malaya and the United Kingdom was maintained. There is little demand for the service in the reverse direction.

C.O.D. Statistics are :—

	Value	
	U.K.	Malaya
	\$	\$
1951	42,000	961,800
1952	54,800	527,500
1953	45,900	575,400
1954	36,534	579,189

Money Orders

The total value of money orders sent from all stations in Sarawak was \$623,085, including the internal service.

Foreign money orders sent from Sarawak included in the above total are analysed and compared with previous years as follows :—

From Sarawak to :

	Malaya	India	U.K.	N. Borneo
	\$	\$	\$	\$
1951	76,450	146,240	9,060	10,800
1952	71,244	205,696	7,196	3,653
1953	75,932	220,108	8,291	2,317
1954	106,456	180,161	8,225	6,510

Statistics of foreign money orders received in Sarawak are :—

To Sarawak from :

	Malaya	India	U.K.	N. Borneo
	\$	\$	\$	\$
1951	37,140	420	2,550	13,100
1952	36,749	591	2,685	15,190
1953	23,437	137	3,268	7,885
1954	44,179	35	3,073	9,316

Postal Orders

The only transactions in Postal Orders were the sale and encashment of British Postal Orders. The statistics are :—

	Qty.	Sold Value	Qty.	Encashment
		\$		\$
1951	5936	34,447	391	2,019
1952	8080	48,294	497	2,797
1953	9387	67,125	686	4,702
1954	9137	70,852	611	3,609

Post Office accounts

A revised system of accounting, gradually introduced into the Post Office during 1952 and 1953, was fully operative in 1954. This system has proved its efficiency in various ways and has resulted in accelerated returns, easier checking and simplified auditing.

Stamps

Mail rates have changed greatly in recent years and the usefulness of the 3 cents stamp has disappeared. It has therefore been decided to withdraw this stamp; a new stamp of value 30 cents is to be introduced, the design of which will be a portrait of Her Majesty the Queen. The framework will be that used for the 30 cent stamp used in 1940 bearing the portrait of His Highness the Rajah of Sarawak. This stamp should be ready for issue early in 1955.

The current issue of the pictorial stamps of Sarawak has been in use for several years, and the Postmaster-General was directed by Government to convene a committee to consider a new issue. The committee was composed of representatives of various associations and individuals interested in stamps. The recommendations of the committee which were approved by Government were as follows:

(a) The current \$5 stamp, which is of excellent design, should be retained.

(b) New stamps of value 50 cents, \$1 and \$2 should be of the same design as the new 30 cent stamp already described.

(c) The remaining 10 stamps of value 1 cent to 25 cents should be pictorial, depicting subjects of interest in Sarawak.

(d) The designs for the pictorial stamps should be open to competition widely advertised with prizes totalling \$4,000.

(e) The closing date for submission of designs should be 31st March, 1955.

By the end of 1954 widespread interest in the competition had been displayed.

Air Day, Kuching
Airport, 13th Sep-
tember, 1954.



Kong Siew Kim

Dredging in the
Sungei Kut, Third
Division.



Work in progress
on the Kuching/
Bau Road, near
Batu Kitang.



A new bus of the
Matang Transport
Company.



Savings Bank

A new system of accounting introduced in 1953 was in use throughout 1954 and proved to be a vast improvement on the former system. The operation of accounts was greatly accelerated and the ledgers are now easy to audit. There were far fewer errors and these were quickly discovered and corrected.

Statistics are:—

	<i>Depositors</i>	<i>Total Credit</i>	<i>Deposit</i>	<i>Withdrawals</i>
		\$	\$	\$
1951	4,897	3,001,548	2,243,055	585,173
1952	5,424	3,102,976	1,504,377	1,473,777
1953	6,085	3,074,770	1,364,088	1,498,019
1954	6,839	3,391,897	1,515,547	1,226,176

XIV

INFORMATION, PRESS AND BROADCASTING

INFORMATION

FOUR years ago, when the Information Service was started, the present staff was engaged on a temporary basis with no security of tenure or incentives. This was inevitable when the organisation and its members were on trial. The service is now accepted as a permanent department of Government and a number of the staff have been offered and have accepted established posts.

The four mobile cinema units have been heavily engaged throughout the year giving 533 film shows to an audience of about 260,266 people. The Information Service film library has been considerably enlarged by purchase and by loans from the United States Information Service and from the Australian Government. Among other films shown, the Royal Tour of Fiji and Tonga, West Indies and New Zealand films were enthusiastically received everywhere. The staff photographer, a Malay, is undergoing a six-months' course of training at the Colonial Film Unit in London. On his return early next year, it is intended to produce films of Sarawak for showing throughout the country. The construction and equipment of an air-conditioned processing room in the Information Office have been completed and the room is now in use.

A new reading room was opened at Lawas and another is planned for Tatau. The supplies of reading matter for reading rooms have been considerably increased by the free grant of papers from the Colonial Office and by larger local purchases.

A large volume of translation in Malay, Sea Dayak (Iban) and Chinese has been accomplished. Five booklets in Chinese covering the work of the Sibu Local Authority and agricultural and health subjects were produced for free distribution.

The Information Officer left Sarawak in November to give a course of lectures on British Borneo in the United States of America prior to spending his leave in the United Kingdom.

PRESS

The newspapers and periodicals published in Sarawak are set out in chapter VIII of Part Three on page ??

The papers continued to maintain a high standard of journalism and improved in appearance.

A new Chinese paper, "Miri Weekly", appeared in November. It is published at Miri in the Fourth Division and is the only publication in the northern part of Sarawak.

Both the monthly newspapers, "Pembrita" in Dayak and "Pedoman Ra'ayat" in Malay, edited by the Information Officer again increased their circulation. As the result of a very full and wide enquiry arising from criticisms, it was decided that "Pedoman Ra'ayat" should no longer be regarded as a paper exclusively for Malays but as a Sarawak newspaper in Malay. Its scope and appeal is to be widened; the partial use of Jawi is to be retained for the present, and simplicity of language without debasement is to be the aim.

BROADCASTING

Radio Sarawak was officially opened at 7 p.m. (Sarawak time) on June 7th, 1954. His Excellency the Governor, Sir Anthony Abell, made the opening address from the studios in which he quoted a telegram of congratulations received from Her Majesty's Secretary of State for the Colonies, The Right Honourable Oliver Lyttleton. In his address, Sir Anthony told his listeners that the planning of Radio Sarawak had commenced in the early days of 1951 and although this may seem a long time, Sarawak had sought sound advice and guidance from those most experienced in the medium of broadcasting. He expressed the country's appreciation of the generosity of the people of Great Britain whose Exchequer provided Sarawak with over \$400,000 towards the capital cost of the Service, and mentioned the commemorative plaque acknowledging this token of good will which

had been placed in the entrance hall of Broadcasting House. Sir Anthony said:

"It is my hope that Radio Sarawak will encourage the peoples of this country to know each other the better and to appreciate the rich variety of their history and culture. In Sarawak we are proud of our social and racial harmony and we look to Radio Sarawak to assist in ensuring that our good record in this respect is consolidated and, indeed, improved upon. I pray that this new voice which goes upon the air in South-East Asia for the first time tonight will speak the words of Truth and Tolerance and Friendship to all."

His Excellency was followed by recorded messages of greeting from Her Royal Highness the Duchess of Kent, His Highness the Rajah of Sarawak, His Excellency the Commissioner-General for the United Kingdom in South-East Asia, and the Director-General of the British Broadcasting Corporation.

Radio Sarawak commenced its career with a single transmission on 353 metres in the medium wave band and 5.025 megacycles in the short wave band, broadcasting programmes in English, Malay, Chinese and Iban. By the end of the year total daily programme output had reached $5\frac{3}{4}$ hours ($6\frac{3}{4}$ hours at the weekend) and a strong short wave signal is heard clearly throughout the country and beyond. The content and quality of programmes appear thus far to be widely approved, but the listening public have not been backward in plying the Service with plenty of constructive comment and criticism; indeed, they have constantly been encouraged to do so and it is well realised that a strong listener reaction is the best guarantee of good quality programmes.

The recruitment and training of staff has not been easy in Sarawak, a country without any background of broadcasting, and recognition must be accorded to the local young men and women who are becoming increasingly competent and expert in their new profession. Both the quantity and quality of local artists and contributors who have come forward have surprised everybody and it is clear that there is going to be, even with expanded output in the future, no lack of local talent to provide good programmes. The World News is relayed daily from the B.B.C.

in English, Chinese and Malay and by the end of the year a local bulletin of home news from British Borneo was due to commence. This, it is hoped, will fulfil a real need in Sarawak where communications are still difficult and where the published word circulates slowly. The majority of Sarawak listeners are understandably more interested in what is going on in Borneo than in distant countries whose politics and activities are still remote from their daily lives. Many programmes, which are designed to stimulate public interest in the working of Government and to encourage the ever more active association of the people of Sarawak with all branches of the public service have already been broadcast. Weekly talks on world affairs are broadcast from Radio Sarawak's political commentator in Singapore, and periodic programmes have done much to stimulate the interest of home listeners in the affairs of Commonwealth countries. Considerable use is made of the B.B.C. transcription service and several recorded programmes of various types have been arranged from London, Australia and Singapore.

During the year the Government has sponsored the sale and distribution of low-cost dry battery radio receivers for the use of up-country listeners and there is no doubt that the listening audience is increasing rapidly. In particular, many reports indicate that the Iban community have taken a special liking to their own programme broadcast over Radio Sarawak and their demand is constantly for more education and instruction rather than for light entertainment.

The daily working costs of Radio Sarawak are paid for entirely by the Government and there is at present no form of revenue from radio to help out at a time when many calls are being made upon the public purse. The Government has permitted Radio Sarawak to find its feet freely and to overcome its birth pangs painlessly. On a number of programmes Government policy has already been criticised directly or by implication by a number of speakers. Government has accepted this as part of the free way of life and will consider itself well rewarded for its expenditure if Radio Sarawak can in the future become a reliable mirror of public opinion and can help to educate the public in the art of responsible disputation and fair criticism.

XV

LOCAL FORCES

THE Sarawak Rangers continued to serve with distinction in Malaya, being attached to units of the British Army and the Malay Regiment. The Rangers are Sea Dayaks or Ibans, as they are often called, nearly all from the Second and Third Divisions. The average total strength is 350 men. Their relations with British troops are extremely cordial.

During the year, Sanggau anak Janti of Ulu Balleh was awarded the Military Medal for bravery in action, and three N.C.O.'s were awarded certificates by the Commander-in-Chief for outstanding service. There were no fatal casualties but one man was wounded in action.

Lieutenant General Sir Hugh Stockwell, K.C.B., C.B., D.S.O., while General Officer Commanding, Malaya, visited the long-houses of some of the Rangers in the Kapit district. Visits were also paid by the Commandant, Sarawak Rangers, and by several British Officers and N.C.O.'s who have fought in company with the Rangers. All these visitors received a warm and hearty welcome.

The Dayaks gain considerable prestige at home from service in Malaya, and in addition, their families benefit through the remittance of part of their pay.

The Rangers engage themselves for two years' service in Malaya and five years on the reserve. In order to preserve and use the training and experience they have gained, it is proposed to encourage the reservists to join the Auxiliary Police and to provide short annual training courses in conjunction with the Field Force of the Sarawak Constabulary.



Hedda Morrison

Recording for Radio Sarawak in a Sea Dayak Longhouse, Rumah Garuh,
Third Division.



Hedda Morris

Sea-Dayak girl listening to Radio Sarawak at Rumah Garuh.

PART III

I

GEOGRAPHY AND CLIMATE

BORNEO is variously argued to be the second or third largest island in the world. Whatever the answer, it is a very, very large island. Sarawak is the westerly part of it, about a fifth of the whole.

This position and size of Sarawak is not a political accident, as in so many countries. It is the response to a geographical fact which determines the life pattern of Borneo in general and Sarawak in particular. This fact is the great range of mountains which runs down the interior considerably to the west of centre. In the south this comes down to low hills in some places, behind the First and Second Divisions. In the north, it rises to a crescendo at Mt. Murud, at about 8,000 feet believed to be Sarawak's highest peak. Here the ranges divide into a more complicated structure around which is built the boundary between North Borneo and Indonesian territory.

All the rivers west of this spinal range—from the north the Trusan, Limbang, Tutoh and Baram, Rejang and its large tributaries, Batang Lupar, Sadong, Samarahan and Sarawak Rivers—flow into the South China Sea through Sarawak. All on the east flow into the Celebes Sea.

The complexity of the sub-ranges running off the spine is still not fully understood, but it is tangled and difficult country. Great tracts of virgin jungle are uninhabited and unknown except to small bands of nomadic Punans who live solely on wild animals and plants.

Among these mountains, however, there are some interesting plateaux or upland pockets, which have lately attracted more and more interest. Only two of these—the Bah Kalalan at the head of the Trusan River and the adjacent Kelabit Highlands in the source of the Baram—are now inhabited. Wet rice irrigation

and animal husbandry are here extensively practised. There is now no doubt, however, that a large native population once inhabited similar elevated areas in the headwaters of the great Rejang system and elsewhere. Here the climate is cooler, health easier, agriculture simpler and the soil often more fertile and sometimes richly volcanic.

From the highlands the big rivers drop in mighty gorges. Above and past them all transport is still on foot. Below, it is by *prahu* (canoe), hand-paddled, until the deeper reaches became practicable for outboard motors and (presently) for launches.

These waterways remain the major life-lines of Sarawak. Nearly all human and commercial traffic depends upon the rivers. It may take a week or more to reach the limit of navigability on some.

In the lower, tidal reaches, sea-going vessels can reach points like Limbang, Marudi, Sibü, Simanggang and Kuching, to bring and to take the major trade. Here is the coastal plain, a wide expanse of flat land, only occasionally relieved by hills. This is inhabited by Malays, Melanaus, Chinese and Sea Dayaks (Ibans). Much of it is swamp, mangrove or nipah palm, rich in minor produce.

Out of the complicated deltas one reaches the coralline coast, with long stretches of sparsely populated sand beach, subject to severe gales in the monsoon (the *landas*, October-March). Off the coast are a few islands, mainly notable for their turtles (see Chapter IV).

The larger part of this tangled land is composed of sandstone. Mt. Mulu, the Niah hills and the curious hillocks around Bau (visible from aircraft landing at Kuching) are of limestone. There are outstanding volcanic formations at Mt. Poi in the extreme south-west and about the Hose Mts. far up the Rejang.

Principal Towns

Kuching, the capital, stands on the Sarawak river eighteen miles from the sea. It is an attractively laid out town with a population of about 38,000. The trading community is mainly Chinese, who live in the town proper, built of brick, plastered and colour-

washed. There are large Malay suburbs. The Governor's residence is the Astana, on the north (left) bank of the river. The town, the main Government offices, the Anglican and Roman Catholic Cathedrals and Schools, the wharves, warehouses and dockyard are on the south. Kuching is a Municipality.

Sibu, the second town of Sarawak is eighty miles up the Rejang River. The whole town area is low-lying and much of it subject to flood; but large building operations with piling and filling have in some measure stopped flooding in the bazaar. Sibu and its immediate neighbourhood are administered by an Urban District Council, and the country district by a Rural District Council, with a joint Finance Committee. The population of the town is over 10,000.

Miri, on the coast fifteen miles from the mouth of the Baram River, owes its existence to the Sarawak Oilfields; its population is about 9,000. It suffered severe damage in the war, the town being almost entirely destroyed; but reconstruction is now almost completed. The bazaar, wharves, hospital and oil company offices lie along the narrow strip of flat land between the sea and the steep slopes about $1\frac{1}{2}$ miles inland.

Other centres of population are: *Limbang*, *Simanggang*. *Sarikei*, *Binatang*, *Mukah* and *Bintulu*. All are small settlements of a few thousand people, with bazaars, wharves and headquarters of administrative divisions (*italicised*) or districts.

Climate & Meteorology

The annual rainfall varies from about 100 inches near the coast away from the mountains to over 200 inches inland in the neighbourhood of mountains. In the coastal area from Miri to Labuan most of the rainfall is between midnight and dawn. The effect of rainfall is most felt in the headwaters of the rivers, where the rivers may rise by as much as fifty feet above their normal level. The total rainfall for the year 1954 at Kuching was 152.90 inches; the maximum monthly rainfall was 16.31 inches in April; the minimum monthly rainfall was 7.74 inches in June; and the maximum rainfall for one day was 3.75 inches on 25th September.

SARAWAK

HEIGHT OF STATION 84 FEET
ABOVE MEAN SEA LEVEL

CLIMATOLOGICAL SUMMARY YEAR 1954

STATION KUCHING

LATITUDE $1^{\circ} 29' \text{ N.}$
LONG. $110^{\circ} 20' \text{ E.}$

1954	Mean 0800 hr. Air Pressure at M. S. L.	AIR TEMPERATURE IN °F										Rainfall			Number of Days					Bright Sunshine				Earth Tem- perature		
		Mean of		Absolute Extremes.						Total Inches	Most in a day	Precipitation	Thunderstorm	Thunder Heard	Fog	Gale	Total	Daily Mean	Per Cent	Length of Day	°F At 1 Foot	°F At 4 Feet				
				Highest Max.	Date	Lowest Min.	Date	Lowest Max.	Date														Highest Min.	Date		
		"A" Maximum	"B" Minimum							Mean of "A" x "B"	Highest Max.	Date	Lowest Min.	Date	Lowest Max.	Date	Highest Min.	Date								
JAN.	1009.8	86.9	71.6	79.3	90.8	13	67.4	16	76.8	15	73.8	4	15.62	3.69	31	26	5	11	5	—	126.60	4.08	34	12.02	81.9	84.7
FEB.	1011.1	87.2	71.6	79.4	92.0	13	67.3	5	82.0	1	73.5	14	9.99	2.80	23	17	6	11	3	—	144.70	5.17	43	12.05	82.8	84.6
MAR.	1010.8	88.8	71.9	80.3	92.4	8	68.7	4	81.8	18	73.7	10	12.11	1.93	8	22	11	14	8	—	178.55	5.76	48	12.07	83.7	85.3
APR.	1009.5	89.7	72.6	81.1	94.0	15	69.9	28	81.8	4	75.1	2	16.31	2.66	4	19	9	11	7	—	170.30	5.68	47	12.12	84.9	86.1
MAY	1008.7	90.0	72.6	81.3	92.7	8	69.8	7	83.3	22	74.8	25	14.65	3.00	31	20	12	15	4	—	193.05	6.23	51	12.15	84.8	86.2
JUN.	1009.5	88.9	72.4	80.7	93.5	5	70.0	21	81.8	3	75.5	6	7.74	1.09	14	16	16	10	3	—	168.45	5.61	46	12.18	84.2	86.2
JUL.	1009.6	88.0	71.3	79.7	93.5	6	68.8	27	76.8	28	73.4	1	9.35	2.80	18	23	8	12	5	—	159.75	5.15	42	12.15	83.3	85.6
AUG.	1009.8	89.6	71.5	80.5	92.8	16	68.3	12	83.3	20	73.8	20	7.97	2.23	17	18	6	10	1	—	166.20	5.36	44	12.12	83.6	85.7
SEP.	1010.8	88.2	71.7	79.9	93.0	1	69.8	12	77.6	5	73.8	25	16.09	3.75	25	20	12	16	3	—	124.25	4.14	34	12.08	83.3	85.7
OCT.	1011.4	87.6	70.4	79.0	92.2	19	68.0	Sev.	82.2	14	72.2	24	12.30	2.88	3	24	10	14	4	—	142.25	4.59	38	12.05	82.8	85.4
NOV.	1011.2	87.3	70.5	78.9	91.0	11	69.0	8	81.5	5	73.2	29	16.01	2.32	14	26	10	12	13	—	131.65	4.39	36	12.05	82.4	84.8
DEC.	1009.9	85.8	70.9	78.3	90.4	31	67.4	20	77.4	18	74.0	11	14.76	3.56	17	23	4	6	9	—	140.40	4.53	38	11.98	82.2	84.6
Total	—	—	—	—	—	—	—	—	—	15th Jan.	—	—	152.90	—	—	254	109	142	65	—	1846.15	—	—	—	—	—
Means or Extremes	1010.2	88.2	71.6	79.9	94.0	15th Apr.	67.3	5th Feb.	76.8	28th Jul.	75.5	6th Jun.	—	3.75	25th Sep.	—	—	—	—	—	—	5.06	—	—	83.3	85.4

1954	Mean 0800 hr. Air Pressure at M.S.L.		AIR TEMPERATURE IN °F.										RAINFALL			Number of days				Bright Sunshine					
			Absolute Extremes.										Total	Most in a day		Precipitation	Thunderstorm	Thunder Heard	Fog	Gale	Total	Daily Mean	Per cent	Length of day	
																									Maximum
mbs.												Ins.	Ins.											hrs.	
JAN.	1009.9	88.5	73.8	81.1	92.0	7	71.2	21	85.0	11	75.6	7	17.51	3.28	17	18	—	2	1	—	196.90	6.35	53	11.93	
FEB.	1011.2	88.0	73.5	80.7	91.6	17	71.0	4	80.0	1	76.4	27	16.79	5.80	2	17	—	3	1	—	191.25	6.83	57	11.98	
MAR.	1010.9	88.9	73.4	81.1	91.6	31	71.0	31	82.4	30	75.0	22	8.16	1.50	13	15	—	4	—	—	195.55	6.31	52	12.07	
APR.	1010.1	89.2	73.8	81.5	92.2	29	72.8	27	81.0	21	76.0	30	19.68	4.41	19	21	—	4	—	—	204.60	6.82	56	12.15	
MAY.	1009.3	90.2	74.3	82.3	93.0	11	72.3	16	84.5	20	76.3	5	6.27	0.99	21	18	—	6	11	—	207.30	6.69	55	12.21	
JUN.	1009.8	88.5	73.0	80.7	93.2	9	70.0	30	80.0	4	74.8	7	10.63	2.39	12	18	—	3	5	—	190.70	6.36	52	12.27	
JUL.	1009.9	89.2	72.2	80.7	93.2	17	69.0	4	84.5	29	74.8	25	16.02	4.88	27	18	—	1	6	—	197.80	6.38	52	12.25	
AUG.	1010.0	89.2	73.0	81.1	92.1	15	70.0	27	84.5	2	74.8	31	9.54	2.00	7	17	—	2	6	—	192.65	6.21	51	12.18	
SEP.	1010.5	88.7	73.0	80.9	92.2	1	70.6	16	84.8	16	74.7	28	17.97	3.51	30	20	—	5	7	—	142.70	4.76	39	12.10	
OCT.	1011.5	87.3	72.7	80.0	89.8	7	70.5	11	79.9	10	74.0	26	24.66	3.34	23	26	—	6	6	—	181.30	5.85	49	12.02	
NOV.	1011.2	88.5	72.8	80.7	91.0	15	71.2	11	85.0	4	74.0	Sev. 7	12.27	2.17	24	19	—	9	3	—	180.60	6.02	50	11.95	
DEC.	1010.0	87.6	73.1	80.3	90.2	4	69.2	31	83.0	17	74.4	9	17.17	3.61	4	23	—	8	4	—	166.95	5.39	45	11.92	
TOTAL	—	—	—	—	—	9th Jun. 17th Jul.	—	—	—	—	—	—	176.61	—	—	—	230	51	72	2	—	2248.30	—	—	—
Means or Extremes.	1010.3	88.7	73.2	80.9	93.2	4th Jul.	69.0	4th Jul.	79.9	10th Oct.	76.4	27th Feb.	—	5.80	2nd Feb.	—	—	—	—	—	—	187.36	6.16	—	—

SARAWAK

Height of Station 9·86 ft.

CLIMATOLOGICAL SUMMARY YEAR 1954

Latitude: 4° 23' N

above M. S. L.

STATION: MIRI

Long: 113° 59' E

1954	Mean 0800 hr. Air Pressure at M. S. L.	AIR TEMPERATURE IN °F.										RAINFALL		NUMBER OF DAYS						BRIGHT SUNSHINE				Earth Temperature 1 ft.			
		ABSOLUTE EXTREMES.										Total	Most in a day	Preupitation	Thunderstorm	Thunder Heard	Fog	Gale	Total	Daily Mean	Per cent	Length of day					
		Means of		Mean of "A" & "B"	Highest Max.	Date	Lowest Min.	Date	Lowest Min.	Date	Highest Min.																
		"A" Maximum	"B" Minimum																								
JAN.	mbs.	1010·1	87·2	74·1	80·7	91·2	7	71·8	22	84·0	21	76·2	3	8·68	2·24	30	18	3	7	3	—	244·00	7·87	66	11·85	84·7	
FEB.	1011·5	86·3	73·9	80·1	90·0	90·0	22	70·6	4	77·8	3	75·8	1	6·22	1·39	10	14	1	2	—	—	196·95	7·03	59	11·95	83·3	
MAR.	1011·3	87·4	73·9	80·7	92·0	92·0	10	71·4	30	82·8	25	76·2	29	7·59	1·99	24	11	3	4	1	—	237·80	7·67	63	12·07	86·1	
APR.	1010·4	88·0	74·9	81·5	90·8	90·8	29	72·8	15	83·2	4	77·0	8	9·60	2·29	19	17	4	10	1	—	226·40	7·55	62	12·18	86·3	
MAY.	1009·5	88·7	74·9	81·8	92·0	92·0	13	72·6	21	81·0	20	77·0	Sev.	4·56	1·21	19	12	2	11	—	—	228·25	7·36	60	12·28	86·7	
JUN.	1010·3	87·2	74·1	80·7	91·8	91·8	2	68·8	30	80·0	4	78·0	11	12·50	3·66	3	17	—	3	—	—	182·20	6·07	49	12·33	85·1	
JUL.	1010·2	88·0	73·3	80·7	92·3	92·3	23	70·6	8	83·4	28	75·6	& 24	9·76	5·07	28	15	3	6	—	—	202·05	6·52	53	12·32	84·7	
AUG.	1010·0	87·9	74·1	81·0	93·0	93·0	7	71·3	10	82·5	28	77·0	31	17·67	3·90	27	19	1	2	—	—	210·80	6·80	56	12·22	84·5	
SEP.	1010·8	87·2	73·6	80·4	90·2	90·2	17	71·5	9	83·0	6	75·5	18	12·71	4·08	6	15	3	5	—	—	167·75	5·59	46	12·10	84·5	
OCT.	1012·0	85·6	73·5	79·5	89·2	89·2	16	71·9	11	82·0	24	75·1	12	21·56	4·86	13	28	3	3	—	—	190·05	6·13	51	11·98	83·6	
NOV.	1011·5	86·2	73·0	79·6	90·5	90·5	15	71·9	Sev.	77·4	19	74·6	7	10·91	2·32	7	20	1	1	—	—	189·90	6·33	53	11·88	83·4	
DEC.	1010·0	86·1	73·7	79·9	91·3	91·3	13	72·0	26	80·2	24	76·7	22	16·07	6·10	14	22	1	3	—	—	180·85	5·83	49	11·83	83·6	
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	137·83	—	—	208	25	57	5	—	2457·00	—	—	—	—	
Means or Extremes.	1010·6	87·1	73·9	80·5	93·0	93·0	7th Aug.	68·8	30th Jun.	77·4	19th Nov.	78·0	11th Jun.	—	6·10	—	—	—	—	—	—	204·75	6·73	—	—	—	84·7



"Satay" man serving his customers in Miri

Hedda Morrison

II

GEOLOGY

SARAWAK occupies an important geological position in Borneo, and this great island itself is in a key position in the island chain lying off the coast of south-east Asia. Mountainous country forms much of the hinterland of Sarawak; these highlands are essentially a prolongation of the Philippine ranges, which continue southwards into northern Borneo, swing gradually south-westwards after entering Sarawak, and then trend west before gradually curving northwest. In the extreme west of the country there is a sudden change in this trend and structures strike north or north-northeast in common with the Malayan regional strike. Recent geological work in the interior of east Sarawak has shown volcanic rocks building two plateaux some 500 square miles in extent and about 3,000 feet in altitude. The rocks are lava flows and ash material; some pumice has been found. This volcanic activity appears to be geologically of recent origin and extensive revision is being made of previous ideas on Sarawak geology.

The territory can be subdivided into three main geological areas. The influence of the different rock types in these areas is shown in that they also form three geographical divisions: interior mountainous areas, bordering undulating country containing isolated mountain groups, and low-lying coastal tracts.

The interior, mainly mountainous, region is formed largely of the older formations i.e. Mesozoic and Lower Tertiary deposits. It consists mostly of hard, crystalline rocks comprising schist, phyllite, hornstone, chert, marble, limestone, quartzite and shale; igneous rocks are common in some districts.

The undulating country, which rises occasionally to over 2,000 feet, consists mainly of Tertiary sediments. These comprise sandstone, shale, grit, conglomerate and limestone; coal seams occur and oil, reservoirs of which form the Miri and Seria oilfields,

has so far only been found in such formations. The Tertiary sediments are economically the country's most important deposits, being the source of both oil and coal.

The low-lying coastal tracts are formed from Pleistocene and recent deposits: these areas are mostly occupied by alluvium and many of them are swampy. The sediments vary from soft mud and peat, to unconsolidated sands, and rare shell banks. Raised beaches are found in some areas, even at a distance from the coast, and there are isolated patches of recent sediment inland representing marine, river and lake accumulations.

Igneous rocks comprising intrusions of granite and diorite are common in west Sarawak, and there is also some gabbro. Dykes, sills, and plugs have been found composed mainly of quartz porphyry, andesite, and, more rarely, dolerite; at a number of localities lava, tuff, agglomerate, and basalt also occur. These are most commonly found associated with Mesozoic sedimentary rocks. The formation of metalliferous mineral deposits, such as gold, antimony, and mercury, is genetically related to the igneous intrusions. Recent work has shown volcanic rocks to cover about 700 square miles of eastern Sarawak.

POLICY AND ORGANIZATION

The main work of the Geological Survey is to assist in making available Sarawak's resources. The survey makes its contribution by finding out geological knowledge and then helping in its application. The mineral resources are naturally the first consideration, but geology has many applications, e.g. in agriculture and in civil engineering.

The geological survey department for Sarawak, North Borneo and Brunei was established in March 1949, with money provided from Colonial Development and Welfare funds and has now been working for five years in the 80,000 square miles which form the territories. Since 1952 Sarawak has paid a substantial share of the cost of the work done in this Colony. Much has been done, but it will be a number of years before a full picture of the geology and mineral resources is obtained. The head office of the survey is at Kuching, and at Jesselton there is a second office; in Brunei work can be done after consultation with the British

Resident. The staff in 1954 comprised seven geologists and twenty-seven Asian field assistants, draughtsmen and clerks, a photo-geologist spent eight months in the country on secondment from the Directorate of Colonial Surveys, London. The department is well equipped to deal with such geological investigations as it is normally called upon to undertake, and has a launch especially designed for river and coastal work.

During 1954 a reconnaissance compilation map on a scale of approximately 16 miles to 1 inch was drafted and is being printed. It makes available for the first time basic data of a type that in most countries are already known, as geological surveys have generally been established for 20 years or more. Here a Government survey had not previously existed, thus for some years energies have been, and must still be, concentrated on determining the regional geology. This work was started by the collection of past geological and mining records, and the recording of known mineral occurrences. The systematic mapping of districts where mineral deposits were known to occur followed, and the reconnaissance of the extensive areas concerning which little is known has been started. The preparation of a regional geological map of 80,000 square miles of mountainous, jungle covered country with poor communications is a long task for a small, newly established survey working alone and making only field surveys. The first stage has however been achieved within five years with the help of photo-geological interpretations and the co-operation of geologists of the Shell group of oil companies who have been carrying out systematic, but specialized, geological investigations in Sarawak since 1909.

REGIONAL GEOLOGICAL MAPPING

Regional geological mapping was continued during 1954 and great progress was made. Exploration and geological surveying of the hinterland was pushed ahead by land, water, and air, much assisted by the R.A.F. who dropped supplies to jungle expeditions in the remote interior. The determination of the nature and age of the rocks of Sarawak is one of the most important objects at present; the main rock systems have been tentatively determined over part of the region, but modifications will be necessary as work progresses. The general picture shows

the rock succession in west Sarawak to be Devonian, Permian and/or Carboniferous, Triassic, Jurassic, Cretaceous, Tertiary and Quaternary. Work elsewhere indicates it to be doubtful if pre-Cretaceous rocks extend into east Sarawak, but shows the existence of the Cretaceous and later systems. Geological mapping is in progress in widely separated districts; this is because the regional geology is being investigated in certain key areas and is also combined with investigations of the economic possibilities at known mineral localities. Thus in the Bau mining area systematic mapping is combined with examinations of gold, antimony, and mercury occurrences; at Silantek, in the Second Division, the coal deposits have been examined, and the regional geology investigated. A third area being investigated is the part of the interior of east Sarawak that forms the Rejang headwaters and the Baram—Rejang watershed. Work during 1954 led to the discovery of coal-bearing formations and of some 700 square miles of volcanic rocks. Some of these build the two plateaux, one in the Usun Apau area, the other between the Linau and Balui rivers, referred to in the first paragraph of this chapter.

Sarawak is a difficult region for geological mapping as the cover of vegetation is dense, swamps are extensive, tropical weathering of the rocks widespread, and communications difficult. Even in a normal year labour in the thinly populated interior often needs to be persuaded to undertake the strenuous field work. The result is that many investigations, which can be completed in a few days in most places often take several weeks here.

Photogeological interpretations have proved the greatest single factor in determining the regional geology. By 1954 about 75 percent of Sarawak had been photographed by the R.A.F. and there are possibilities of the work being completed during coming years. Interpretations of air photographs are used as a basis for field mapping both by this survey and by the Shell group of oil companies. Considerable help with the preparation of such maps has been received from the photo-geological section of the Directorate of Colonial Geological Surveys, London, and during the year one of their photo-geologists spent a time in this country obtaining field knowledge which will help with future work. Fortunately Bornean geology is such that many of the main rock groups can be identified from air photographs when these are interpreted

together with some field evidence. Use of such interpretations has helped enormously to increase the speed of geological surveying, for apart from their intrinsic worth as maps, they assist the geologists to concentrate their field investigations in suitable areas, and to overcome the difficulties resulting from bad communications, rare rock exposures, and slow travelling in jungle-covered swamps and mountains. If the preparation of geological maps of this region depended on the old time methods of field surveying alone, it would have been many years before the regional map prepared in 1954 could have been produced.

ECONOMIC VALUE OF GEOLOGICAL SURVEYING

The chief value of a geological survey is long term, and comes from the fundamental data assembled during systematic geological mapping. Immediate economic results are rarely obtained from such work and often the returns are not very tangible, and sometimes valuable only in a negative sense; e.g. it may be shown that in an area it is useless to drill for underground water, or to search for good agricultural land or roadstone or for minerals such as coal, oil, or gold. Some discoveries of economic value have, however, already been made. Aluminium ore has been discovered and prospected, and good roadstone found in a part where supplies have long been inadequate. Alluvial gold has been tested, and the cave phosphate (guano) deposits investigated and their amount estimated. It has been shown that limestone suitable for cement manufacture exists in several parts of the region. Coal deposits have been investigated, and detailed reports on them produced. Records of previous mining and prospecting for gold, coal, oil, antimony and mercury have been compiled, and some of the deposits investigated.

III

HISTORY

THE archaeological excavations begun in 1952 at Santubong, the first on an extensive scale in Sarawak, following upon the more specialised working in caves at Bau, are beginning to give us for the first time some idea of the earliest history of Sarawak in human terms. The importance of these excavations can be summarised under three headings :

(1) They establish that in Sarawak the iron age started much earlier than had generally been supposed. It would seem that the inhabitants of then remote district of Upper Sarawak had iron implements many centuries ago.

(2) The source of these is now indicated as having been through Santubong and other coastal trading centres. These show a much more extensive early Chinese influence than had previously been expected.

(3) Hindu influences appear to be emerging as much less clear cut than was previously thought. Sarawak received the last gasp of Hinduism, heavily inter-mixed with local paganism and other influences.

A search for gold was certainly one of the primary factors in developing trade through places like Santubong but there was also a large wider trade, at least as far north as Brunei, in resins, hornbill ivory and other jungle produce.

Gold has long been worked in the area extending from Kuching south-westward to Sambas and Montrado in West Borneo. Though the production of this area is insignificant in comparison with the present world output, it must, if Borneo gold was known in the days of the great Indian trading expeditions, have been of considerable importance in the ancient world. The fabulous "Golden Chersonese" may well have included Western Borneo and indeed a theory has recently been advanced that *Yavadvipa* (the "land of gold and silver" of the Ramayana), Ptolemy's *labadiou* and *Ye-po-ti*, which was visited by the Chinese Buddhist

monk Fa-Hien on his return from India to China in 413-414 A.D., all refer to the country lying between Kuching and Sambas.

It is likely that Sarawak later fell under the sway of the great maritime empire of Srivijaya, the Indian Buddhist thalassocracy centred on southern Sumatra, which reached its zenith towards the end of the twelfth century. Srivijaya fell about a century later before the attacks of Siam and the Hindu-Javanese kingdom of Majapahit, and Borneo fell within the sphere of influence of the latter. It is to this period that a considerable number of the Indian remains in Sarawak are doubtless to be dated. The Majapahit empire in its turn began to crumble early in the fifteenth century before the Muslim States established by the advance of Islam into the archipelago.

After the fall of Majapahit, Sarawak formed part of the dominions of the Malay Sultan of Brunei, and it is first known to us by name through the visits to Brunei of Pigafetta in 1521, of Jorge de Menezes in 1526, and of Gonsalvo Pereira in 1530, and from an early map of the East Indies by Mercator. Sarawak was then the name of a town on the river of the same name, doubtless occupying much the same position as Kuching, the present capital.

The history of Sarawak as an integral State begins with the first landing in August, 1839, of James Brooke. At that time Sarawak was the southern province of the Brunei Sultanate. The oppression of the Sultan's viceroy, Makota, had goaded into revolt the Malays and Land Dayaks resident in the area known as Sarawak Proper, and the Sultan had sent his uncle, the Rajah Muda Hassim, to pacify the country. The insurgents were led by Datu Patinggi Ali. James Brooke departed after a short stay and returned in 1840, to find the fighting still in progress. At the request of the Rajah Muda Hassim, he interceded in the dispute, brought about a settlement and was rewarded for his services by being installed on the 24th September, 1841, as Rajah of the territory from Cape Datu to the Samarahan River. This, however is but a small part of the total area which was later contained within the State of Sarawak.

For the remaining twenty-three years of his life Rajah Brooke devoted himself to the suppression of piracy and head hunting, often with the help of ships of the Royal Navy, which performed

Gunong Sadok
(2720 feet) in the
Second Division.
This was the
mountain fortress
of Rentap, the Sea
Dayak Chief on
the mid-nineteenth
century.



Abg. Haji Husaini bin
Datu Dol



Philip S. J.

The Residency Garden, Limbang.

almost incredible feats of navigation and endurance. It is a story of high adventure, financial difficulty, and political persecution at home by the Radical party, followed by complete vindication and success. Sarawak was recognised as an independent State by the United States of America in 1850, and Great Britain granted recognition in effect by appointing a British Council in 1864. In 1861 the territory of Sarawak was enlarged by the Sultan's cession of all the rivers and lands from the Sadong River to Kidurong Point.

Sir James Brooke, at his death in 1868, bequeathed to his nephew and successor, Charles Brooke, a country paternally governed, with a solid foundation of mutual trust and affection between ruler and ruled.

The first Rajah pioneered, subdued and pacified; Sir Charles Brooke, in a long reign of fifty years, built with such conspicuous success upon the foundations laid by his uncle that piracy disappeared, head-hunting was greatly reduced and the prosperity of the country increased by leaps and bounds.

Further large accretions of territory occurred in 1882, when the frontier was advanced beyond the Baram River; in 1885 when the valley of the Trusan River was ceded; and in 1890, when the Limbang River region was annexed at the request of the inhabitants. In 1905 the Lawas River area was purchased from the British North Borneo Company with the consent of the British Government. British protection was accorded to Sarawak in 1888.

Between 1870 and 1917 the revenue rose from \$122,842 to \$1,705,292 and the expenditure from \$126,161 to \$1,359,746. The public debt was wiped out and a considerable surplus was built up. In 1870 imports were valued at \$1,494,241 and exports at \$1,328,963. In 1917 imports totalled \$4,999,320 and exports \$6,283,071. Roads had been constructed, piped water supplies laid down and a dry dock opened in Kuching. There were telephones, and the wireless telegraph was opened to international traffic.

The third Rajah, Sir Charles Vyner Brooke, succeeded his father in 1917, and progress continued in all spheres. Head-hunting, as a result of tireless efforts, was reduced to sporadic pro-

portions, revenue increased, enhanced expenditure resulted in improved medical and educational services, and in 1941, the century year of Brooke rule, the State was in sound economic position with a large sum of money in reserve. As a centenary gesture, the Rajah enacted a new constitution, which abrogated his absolute powers and set the feet of his people on the first stage of the road to democratic self-government.

Then came the Japanese invasion and occupation. Social services and communications were neglected; education ceased; health precautions were ignored; sickness and malnutrition spread throughout the State. The people had been reduced to poverty and misery when, after the unconditional surrender of Japan, the Australian forces entered Kuching on the 11th September, 1945.

For seven months Sarawak was administered by a British Military Administration, as a result of whose efforts supplies of essential commodities were distributed, the constabulary re-formed and the medical and educational services reorganised.

The Rajah resumed the administration of the State on the 15th April, 1946. It had, however, for some time been evident to him that greater resources and more technical and scientific experience than he then commanded were needed to restore to Sarawak even a semblance of her former prosperity. He therefore decided that the time had come to hand the country over to the care of the British Crown, and a Bill to this effect was introduced into the Council Negri in May, 1946, and passed by a small majority. By an Order-in-Council the State became a British Colony on the 1st July, 1946.

IV

SCIENCE AND THE ARTS

IF the year for the arts has not been a brilliant one, for the sciences progress has been notable; knowledge of Sarawak's human and natural sciences has been considerably advanced, especially in the fields of anthropology, archaeology and ornithology. At the same time, and auguring well for the future, facilities for training the youth to study scientific subjects have been much extended; during the past year two of the main schools in Kuching have developed up-to-date science teaching laboratories.

The Brooke Society, especially concerned with natural history, was inaugurated in July and drew considerable audiences to lectures on archaeology, geology, exploration and other local subjects. This is another symptom of growing public interest in the sciences, which was further evinced by increased space devoted to these subjects (particularly archaeology) in the press and on the radio.

Arts and Education

Borneo has its own very vital arts and crafts. Inevitably these are threatened by the greatly accelerated and sometimes uncontrolled impact of western civilisation. In particular, the influence of education and of mission activities has very generally been to create with extreme rapidity a new set of values the significance of which is often imperfectly understood by the native peoples most affected. Ten years ago every young Kenyah, Kayan or Kelabit was proud of his fine long black hair; his handsome *chawat* (loin-cloth); his leopard teeth ear-rings, if he was fortunate enough to possess them; and his tatoos. Today these fashions are replaced by short hair, short trousers and skin clear of any design except vaccination.

The traditional systems of independent craftsmanship, of embroidered bark-jackets, fine beads, carved bone hairpins, ornate

symbolic figures in wood, decorated pipes, are threatened with early extinction. The old Ming jar and the Sung celadon plate, heirlooms of yesterday, are now shadowed by the refrigerator, the bicycle and the gramophone playing ceaseless Malay songs.

It is against this background that the thoughtful have to teach in the aesthetic field. There is nothing they *can* teach of carving, metal-working, design, weaving. The people do—or did—know it all uniquely. The young people no longer want it; better to buy cloth than make it, to use a \$2.00 *parang* knife instead of a finely wrought one from the Batang Kayan. On the other hand, efforts to teach western art, painting in perspective and such like, are not at this stage producing results. This is a fairly familiar dilemma where west teaches east so fast, and one that has seldom been solved at all effectively.

Good work has been done in the more limited field of “western” art, by the Kuching Art Society. The members are Chinese, Malay and European, and they work in mixed styles not related to the “Dayak” aesthetic discussed above.

The Sarawak Museum

The museum was established by the second Rajah Brooke (Sir Charles) in 1886 and is the only museum in Borneo. Standing in beautiful grounds in Kuching, it has the best collection of Borneo arts and crafts in the world, and is a great attraction both to tourists and to local institutions. Of about 70,000 visitors during 1954, about a quarter were Dayaks, a third Malays, a third Chinese and the rest European and other races. School children accompanied by their teachers came in increasing numbers. The two stuffed orang-utans, the snakes, the big whale skeleton and the human heads interest the young, while the photographs of Kuching in the past and the crafts collection especially attract the older visitors.

The collections continued to grow in 1954. It is now necessary to enlarge the premises. Thus in October a large new building, to house reference and study material, archives, reference library and offices was begun in the museum grounds. It will be ready by mid-1955.

Art Collections

The general decline in the old customs of the native peoples, and with this, the decline in arts and crafts intimately associated with belief and conduct, particularly concerns the Sarawak Museum. During the year especial efforts were made to fill in gaps in the ethnological collections, though without marked success since the good things are becoming few and far between. It is hoped to start a special programme for this purpose next year.

Meanwhile, however, some very useful additions to the permanent collections have been won. A new departure is the recruitment and employment of two famous craftsmen from the Long Nawang district of the far interior. This is the centre of the great tradition in Kenyah metal, bead and embroidery work. The loveliest things in Borneo come from there.

These two men (through the good offices of Temenggong Tama Weng Ajang and his brother Tama Weng Tinggang) came to Kuching in November. They are engaged in a series of carvings and designs to decorate the new Building.

Important new acquisitions in the ceramics section, including the first perfect Tze Chou (Sung) type jar known from Borneo, have been made. Curiously enough, soon after this had been found a number of broken pieces of this ware, and of very fine quality, were found in excavations at Sungei Buah.

Of especial value to students will be the series of flakes and blade stone instruments acquired in 1954 from the early "mesolithic" deposits at Niah. These are the first to have been discovered in S.E. Asia in an orderly time sequence, stretching back thousands of years through three distinct stone ages. (See *Archaeology*, below).

Legislation

During the year the Antiquities Ordinance came into force. It provides for the preservation of ancient monuments, licensing and control of sale and export of antique objects, and restriction of excavation and disturbance of historic and prehistoric sites. This law is based on recent experience in other countries and

provides adequate though not unreasonable power of supervision and restraint in the interests of the country's traditions, cultural centres and objects of arts.

In December 1954 the first actions were taken under this Ordinance: the examination and evaluation of collections which persons wished to take out of the country and the scheduling of Niah Caves as an ancient monument and sanctuary.

A National Parks Ordinance was passed in December; this is designed to protect wild life over wide areas as well as to preserve natural amenities. The first National Park has not yet been scheduled.

Archaeology

1954 seems to have been an "archaeological year" all over the world. It was certainly so in Borneo.

In 1954 not less than 50,000 tangible links with Borneo's pre-history were dug out, labelled and preserved systematically.

The Niah cave excavation was the most exciting event of the museum year. The museum staff worked in this magnificent cave for two weeks and a large local labour force was recruited. About a quarter of the cave floor in the area of possible habitation was dug and the rest is to be tackled in 1955.

The results are already very clear cut and add much to knowledge as well as to local collections. Until Niah, there was no definite *evidence* that stone-age man lived anywhere in Borneo. His stone implements had been found—the museum has increased its collection from a dozen to several hundred since 1947—but stone tools travel, are kept and taken elsewhere by people centuries later, as is the case to-day.

There is now a very rich set-up of stone implements of three distinct types—two not previously known—found in a stratified deposit and in association with perfect human skeletons, primitive pottery and masses of animal remains.

This stratification can be summed up very preliminarily as follows:

1. On the surface, "late stone age" or *neolithic* deposits, including human skeletons, often coloured magenta with very crude beads and the first stone-age matting yet known in S.E. Asia. These have remained in wonderful preservation because the cave is vast and perfectly dry in the mouth. Only further out does rain enter; further in lies the bat and swift guano which both acidifies the ground and attracts seekers after fertiliser to upset the whole terrain.

2. In the intermediate layers, "late middle stone age" or *later mesolithic*. Characterised by massive, half-worked stone-hools, such as hand choppers; no pottery, but quartz pebbles for making fire and masses of charred bone; signs of cannibalism also; no matting, beads or other refinements.

3. Deep down, and reaching down to 7 or 8 feet—a depth involving a very long period of deposit in this cave (? 5,000 years)—"early middle stone-age" or "*early mesolithic*". This is, naturally, simpler and cruder than the layers above. The stone tools are far rougher and consist only of flaked chips and blades, unpolished. These are made of quartzite and other very hard rocks. Such "flake and blade cultures" are known from the Celebes and Sumatra, but have not before been found in an orderly succession such as we now have at Niah.

It is too early to say more than this. The skulls and skeletons are now with Professor Sir Wilfred le Gros Clarke, F.R.S. at Oxford. They should throw much additional light. The University of Chicago have promised to age the deposit by modern methods, C-14 carbon tests. And the excavation itself has to be completed. Meanwhile Niah cave mouth, always one of the great natural sights of Borneo, has been declared an Ancient Monument under the above-mentioned Antiquities Ordinance.

Sungei Buah Excavation

For some years, as recorded in previous Annual Reports, archaeological work has been proceeding around Santubong in the Sarawak River delta. First, digging took place at Bongkisam, a Ming (up to C. 1400 A.D.) site. Then traces were found of

an earlier and very large trading settlement on the Sungei Jaong, a now silted-up branch of the river, dating mainly before 1300 A.D. In 1954 a third site was successfully located within two miles of Santubong Peak, on the even more silted-up tributary of Sungei Buah. This has proved to be probably the earliest of the three sites of delta trade settlement so far located. There is not a single piece of certain Ming pottery or porcelain. Some items are probably earlier than Sung (i.e. pre 100 A.D.).

Most useful at Buah, however, is the partial solution of a long-outstanding problem. On all these sites there are great quantities of iron slag. Only in December 1954 at Buah was it possible to locate an actual iron-working kiln *in situ*, 7-9 feet down at the swamp edge. This, in its association with ceramics and Indian beads, can hardly be later than the 12th century and perhaps "Indian" in origin.

Anthropological Research: the Kelabits

This continuing project was only mildly pursued in 1954 (cf. 1953 Report). Staff was not available to visit the Kelabit uplands, but at least one Kelabit was always resident in the Curator's house during the year and the fund of folklore and stories was constantly increased.

More should be possible in 1955. Kelabit culture is changing very rapidly under post-war missionary and government educational influence. The "old days" of tradition are almost at an end. Fortunately, very full written records cover the period from 1945.

Malay Socio-Economic Survey

This project is financed by C.D. & W. funds. The fieldwork was completed in 1954. Thanks partly to the generous co-operation of Professor G. H. Dobby of the University of Malaya, a good body of research results has been obtained. The final report is now in preparation.

The central theme will be the sense of time and scale of value among Sarawak Malays, interpreted in the light of Islam, their local origins, and the compelling factors of life on the coastal plain with its tidal rivers.

Sarawak Museum
Expedition to the
great caves at
Niah. The chief
stone-age digging
site in the main
cave mouth.



Stone-age burial
(one of many) ex-
cavated by Sara-
wak Museum Ex-
pedition to Niah
Caves. 1954.



The report is being written while the author lives in Malay villages and houses—an advantage in atmosphere and accuracy.

Natural History

Work has continued on augmenting scientific reference collections. Several original studies of the Sarawak fauna, notably birds and beetles, are in the press for 1955 issues of the *Sarawak Museum Journal*. Special collections of birds are being worked out at the American Museum of Natural History and a lengthy report on Kelabit birds is in draft; this will be published in New York when complete.

Other aspects of natural history are dealt with in the next chapter.

V

FLORA AND FAUNA

BORNEO is very rich in animals and plants. In this connection the island has two characteristics. Firstly, it is very largely mountainous (see Chapter I). Although there are few great mountains, there are many peaks and ranges over 3,000 feet high which intersect and intermingle to form a tangled chaos over the whole interior. Secondly, it is one of the least densely populated tropical areas in the world. That is the scale. These two characteristics, wide areas of mountain and of virgin jungle, give Borneo in general, and Sarawak in particular, a rich and special share in the fauna and flora of South-East Asia.

The jungle is a vibrating sound board, and much of its life goes on high above the human visitor's head. It is responsive to strange and ignorant noise and it is affected by heat and light. Its great, varied, humming activity comes in the early hours of morning and the late hours of the evening. At noon, the most observant watcher in the world may patrol it and fail to recognise anything other than shadow, and indeed fail to be recognised even by a mosquito.

But those who are prepared and able patiently to master the dawn or the dusk of the Borneo jungle will find therein some of the richest and most exciting forms of life that the human mind can describe or imagine. There are more than a hundred species of mammals. There are more than six hundred kinds of birds, of which it is easy to see and identify a hundred within a few days. There are tens of thousands of sorts of insect and plant. Everywhere, growing along with the darkly vivid jungle, there is vigorous life which includes some of the most ordinary as well as some of the most extraordinary animals and plants.

It follows that it is difficult to know where to begin in describing briefly such a variety of life in the so inaptly termed "Green Desert" of Borneo.

THE MILLIONAIRE CAVES

Perhaps the most dramatic place and easiest way to see into the teeming life of the island is to step back out of the jungle and to go into one of the great caves which honeycomb for miles wherever there is an outcrop of limestone; that is, Mt. Mulu on the Tutoh; around Long Akar on the Baram; inland from Bintulu; Gunong Subis at Niah; and in many small hills behind Bau, above Kuching. Niah, already discussed as a new prehistoric site, is the largest, loveliest and fullest of life. Its principal inhabitants are roughly:

c. 1,000,000 bats

c. 1,000,000 swiftlets

And when the bats go out and the swiftlets come home at dusk it is difficult even to control your mind to millions. It is hard to imagine there are so many of any one animal in the whole world, let alone one cave. The bats are of several kinds, some the size of a crow, others of a sparrow. Into the night they go to forage the air over and in the jungle. The swiftlets (of the genus *Collocalia*) are probably of three kinds, have tiny bodies and scimiter wings. Their nests they make of saliva excreted from special glands. These are the birds' nests of soup fame, prime delicacy of the Chinese gourmet. They are exported in quantity, the best quality (pure saliva) fetching as much as £10 a pound.

These swiftlets, who take their food as tiny beetles in and over the jungle canopy, work for man in two ways. One end salivates the nests; the other gives droppings of beetle elytra providing guano, a very useful local fertiliser.

But these are just two of several thousand vertebrate (spined) living species in Sarawak—and as yet uncounted tens of thousands of insects, shells and so on.

Let us now examine some of the more interesting forms.

Mammals

The most famous of Borneo animals is the "orang-utan" or *maias*, one of the very few close cousins of *homo sapiens*. It is found only in Borneo and a small part of Sumatra. Despite constant persecutions and inadequate protection, there are still

a number of maias in Sarawak and in sections of the adjacent territories of Indonesian Borneo and North Borneo. This charming, amiable, chestnut-furred animal, desired by zoos all over the world, can still be seen, shambling from tree to tree in the inland sections of the First and Second Divisions. Another of the five great apes of the world also occurs in Borneo, the gibbon or *wak-wak*, probably the most graceful of all arboreal animals. A favourite pet, it is in captivity very susceptible to pneumonic diseases.

A little below the apes are the monkeys. Here again, Sarawak can claim some distinction. The proboscis monkey, represented on North Borneo stamps, is peculiar to the island and is distinguished by an immense rubicund portwine nose. It seems a little unfair that the native name for this otherwise, elegant animal, sometimes standing almost as high as a man, is *orang blanda*—in English, a Dutchman.

Sarawak is rich in other mammals, of which there is space to mention only a few. The rhinoceros is dangerously near extinction, largely owing to the persistent (now illegal) hunting of these animals by the Dayaks, who sell them to the Chinese. Two were reported alive in 1954. Wild cattle are quite commonly found in the northern part of the country; wild elephants are confined to North Borneo. Three sorts of deer are extremely numerous; the sambhur deer or rusa, almost as big as a cow, is in some places a nuisance to rice farmers.

There is only one dangerous animal, the honey bear or *bruang*. The leopard can be large and magnificent, but the people of the island regard it as effeminate. The honey bear if upset or with a family of young, will attack the unwary traveller. Many are the stories of people who have been clawed and in some cases killed by angry honey bears.

Birds

There is also to be found in Borneo one of the richest bird faunae in the world. There are several sorts of hornbill, notorious for their domesticity: the male walls the female into the nest, feeds her there and only liberates her when the young are ready to fly. There are several fine pheasants; the Argus is

as handsome as a peacock; its dancing grounds are stamped out of the mud so that several males can compete to the delight, or at least to the concern, of the females.

Sarawak has parrots, broadbills, ten kinds of pigeon, egrets, nearly twenty kinds of woodpeckers, exquisite honeyeaters and flower-peckers, the lovely-voiced yellow crown Bulbul, and so many many other birds that it is doubtful if any one person could ever learn to recognise them all on sight.

The finest of our seabirds is the great Man-o'War or Frigate Bird. This does not nest on our coasts, but comes about the offshore islands in hordes during the monsoon, circling, spiraling and gliding in effortless grace for hours upon the wind.

Turtles and other Reptiles

Sarawak's reptilian speciality is the big Green or Edible Turtle. Although this occurs elsewhere, only here do so many come up to lay, on three small beaches on islands off the coast (The Turtle Islands). Live turtles are protected. Only the eggs are collected, and a proportion are left to hatch out. In 1954 advances were made in experimental methods of rearing the baby turtles until tough enough to evade most of their fish enemies. The study of turtle migrations and laying by marking females with tags was also continued.

In most seas this handsome turtle is in danger of extinction from the slaughter of adults. In Sarawak it seems to be keeping up its numbers satisfactorily.

In 1954 a total of 1,121,890 eggs were collected from the three beaches. These at present sell wholesale at six cents each. Soft-shelled and shaped like ping-pong balls they are regarded as delicacies by Malays, Chinese and Dayaks alike.

Sarawak has the most dangerous and deadly snake in the world, the hamadryad or king cobra. This reptile, which can grow over fifteen feet in length and is quite common, is one of the very few in the world which will sometimes deliberately attack human beings.

Lizards, of which there are nearly a hundred kinds, are more conspicuous, especially because of the attraction which human dwellings appear to have for some varieties; the most obvious are the *gecko* or *chichak*. An observant person may sometimes see flying lizards, which actually only glide on membranes extended between the front and back limbs. Sarawak is rich in flying forms, its flying snake being one of the most spectacular. This peculiar snake, which looks quite ordinary, can (when it wishes) extend its ribs to produce two lateral sails and glide for quite a distance. One, let go from the upper storey of the Sarawak Museum, went nearly 50 yards. Among the amphibians, there are also flying frogs and frogs with small bodies and big feet upon which are suckers. There are also very large toads, some of them weighing several pounds.

Fish

Sarawak has little that is especial in its fish life; if anything, fish are below average in abundance here, particularly sea food fish, which are barely sufficient to satisfy the local market. The baracuda, bonito and horse mackerel are the only sporting fish. Big game fishing as such has not yet been shown to be feasible in Sarawak waters.

A notable event in 1954 was a minor invasion of Ocean Sunfish. These weirdly shaped, vertically flat, "delta-wing" jobs, run to a huge size in the Atlantic. They have seldom been recorded in the tropical Pacific and only once before in Sarawak. In August 1954 numbers were sent into the Museum from fish traps in the estuarine waters of the south-west. They are almost inedibly tasteless and have the capacity to lie on the surface sunning—hence the name.

Spineless Animals (Invertebrates)

Perhaps enough has been said to indicate the tremendous wealth of Sarawak's animal and plant life. Numerous other illustrations of this wealth can be produced from *molluscs* (shells), *crustaceans* (crabs, etc.), *arthropods* (spiders, etc.), and *nematodes* (worms). In the invertebrate section of spineless or boneless animals the variety of the forms is immense.

Sarawak also has many beautiful butterflies, the loveliest of which is the Rajah Brooke's Bird-wing (*Ornithoptera*), shown on the one cent stamp.

Flora

An essential background, of course, to all the animal life (the fauna) is the plant life (the flora). This is a little less varied, but very prolific and fertile. There are some distinct forms of vegetation which largely determine the fauna living within them. Above about 3,000 feet on the mountains there is low vegetation draped with mosses with its own special life—the "moss forest habitat". In the lowlands, the jungle grows to fine heights and, where it has not been felled, produces several different levels of animal and plant life. This virgin jungle, with its canopy, sub-canopy, intermediate and ground level layers, is the most widespread and the richest environment for the plant life of Borneo. Large parts of Sarawak are entirely virgin jungle, uninhabited by man except for the occasional visits of nomads.

Where man has had his influence there is secondary jungle, gradually reverting to primary jungle over many years and distinguished by the lack of great trees. On the coastal plain there are swamp forests, largely areas of mangrove, nipah palm and, along the sand fringes, of casuarina. As with the animals, so with the plants, there is abundance in quantity, quality and variety.

To the hasty eye, it all looks rather dull, uniform and unexciting. There are no towering banks of orchids or great clutching plants. There is the dark green background, the damp, and the decay, the essence of equatorial jungle. But to those who are prepared to take a second, slower look, to sit around patiently to be bitten by leeches, wonders and beauties will presently reveal themselves. For Sarawak has some of the world's most glorious orchids, such as the epiphytic *Arachnis grandiflora*, not obvious but easily found upon the trees which are their hosts. The most weird is perhaps the *Rafflesia*, a staggering yellow and red blossom which comes straight out of the ground as a jungle flower almost big enough to bathe in.



Hedda Morris

A Chinese tailor in Sibu

VI

ADMINISTRATION

SARAWAK is divided for administrative purposes into five Divisions, each in charge of a Resident.

These Divisions are

- the First Division, with headquarters at Kuching;
- the Second Division, with headquarters at Simanggang;
- the Third Division, with headquarters at Sibü;
- the Fourth Division, with headquarters at Miri;
- the Fifth Division, with headquarters at Limbang.

Each Division is sub-divided into a number of Districts, administered by District Officers, and most of the Districts into smaller areas or sub-districts each in charge of a member of the Native Officers Service. The District Officers are advised by District Advisory Councils and sometimes Chinese Advisory Boards set up in each District, whilst Residents have the benefit of the advice of Divisional Advisory Councils which meet at frequent intervals at Divisional Headquarters. As far as is practicable, Government attempts to free Residents and District Officers from as much office work as is possible in order that they may tour their areas and maintain the close contact with the people which has always been the keynote of administration.

The most important development in administration since the termination of World War II has been the progress made in Local Government. Before the War the Native Administration Order was published as an enabling Ordinance to allow the gradual introduction of the people themselves into the administration of their own affairs. This Order contemplated the setting up of village committees to replace the individual chiefs, but the first experiment on these lines did not get very far owing to the outbreak of war and the impossibility of providing adequate supervision. In 1947 a scheme was drawn up for the development of Local Government through Local Authorities with their own Treasuries, and five such Authorities came into being at the beginning of 1948. The Local Authority Ordinance, 1948, forms the basis for the powers of these Authorities. Their revenues

consist of direct taxes, fines and fees, supplemented by a grant from the Central Government calculated according to the number of tax-payers.

The majority of the Authorities first constituted were established on a racial basis; it has long been discovered that this is an unsound foundation for such bodies and it is not proposed to constitute any more. The pattern upon which Local Government will be based is the Mixed or Inter-Racial Authority having over people of all races within its area.

To this end, therefore, the programme of the development of mixed authorities was continued; three racial Authorities were developed into mixed authorities during 1954 and one new mixed authority was formed. Plans were also completed during 1954 for three more racial authorities to be constituted as mixed authorities on the 1st January, 1955. The total number of authorities so far constituted is now seventeen but of these the number of mixed authorities has risen from four to seven. It is estimated that some 260,000 people are now subject to local jurisdiction.

Satisfactory progress was maintained by the existing authorities and the strengthening of the racial authorities by their admittance of other races and consequent conversion to mixed authorities has been markedly successful.

In 1941, to commemorate the centenary of Brooke rule in Sarawak, His Highness the Rajah granted a Constitution and, in 1946, when Sarawak became a Colony, by Letters Patent the Supreme Council and Council Negri retained the authority granted to them.

The Constitution grants legislative and financial jurisdiction to the Council Negri, a body consisting of 25 members, 14 of whom are official members appointed from the Sarawak Civil Service and 11 of whom are unofficial members representative of the several peoples dwelling within the country and of their various interests. The unofficial members are appointed by the Governor in Council and hold office for a period of three years.

In addition to the 25 members there are 4 standing members. The Constitution Ordinance provides that a native of Sarawak, who was a member of Council Negri immediately prior to the enactment of the Ordinance, and who is not a member of the Council appointed under the provisions of the Ordinance, shall nevertheless be deemed to be a member of the Council Negri and shall have the right to attend all meetings of the Council and of speaking and voting therein until he shall die or resign or cease to be a member of the Sarawak Civil Service.

The Council Negri has the power to make laws for the peace, order and good government of the country and no public money may be expended or any charge whatsoever made upon the revenue of the country except with the consent of that body.

The Constitution Ordinance also provides for a Supreme Council composed of not less than five members, a majority of whom shall be members of the Sarawak Civil Service, and a majority of whom shall be members of the Council Negri.

All powers conferred upon the Rajah or the Rajah in Council by any written law enacted before the date of operation of the Cession of Sarawak to His Majesty are vested in the Governor in Council. In the exercise of his powers and duties the Governor shall consult with the Supreme Council, except in making appointments to the Supreme Council and in cases

(a) which are of such nature that, in his judgement, Her Majesty would sustain material prejudice by consulting the Supreme Council thereon; or

(b) in which the matters to be decided are, in his judgement, too unimportant to require their advice; or

(c) in which the nature to be decided are, in his judgement, too urgent to admit of their advice being given by the time within which it may be necessary for him to act.

VII

WEIGHTS AND MEASURES

THE standard weights and measures recognised under the Laws of Sarawak are the Imperial yard, the Imperial pound and the Imperial gallon.

Certain local customary weights and measures having the values set out below are also lawful:

1 Tahl	=	1 $\frac{1}{3}$ ozs
1 Kati (16 tahils)	=	1 $\frac{1}{3}$ lbs
1 Picul (100 katis)	=	133 $\frac{1}{3}$ lbs
1 Koyan (40 piculs)	=	5333 $\frac{1}{3}$ lbs
1 Chhun	=	1.19/40 inches
10 Chhuns	=	1 Chhek = 14 $\frac{3}{4}$ inches
1 Panchang	=	108 stacked cubic feet

VIII

NEWSPAPERS AND PERIODICALS

	FOUNDED
<i>Sarawak Tribune</i> , Kuching (daily—English)	1945
<i>Chinese Daily News</i> , Kuching (Chinese)	1945
<i>Sarawak Vanguard</i> , Kuching (daily—Chinese)	1952
<i>Ta Tung Daily News</i> , Sibü (Chinese)	1948
<i>Sie Hwa Daily News</i> , Sibü (Chinese)	1952
<i>Utusan Sarawak</i> , Kuching (bi-weekly—Malay)	1949
<i>Pedomän Ra'ayat</i> (monthly—Malay)	1950
<i>Pembrita</i> (monthly—Iban)	1950
<i>Sarawak Gazette</i> (monthly—English)	1870
<i>Co-operation in Sarawak</i> (monthly—English—Malay—Iban)	1952
<i>Miri Weekly</i> (Chinese)	1954

IX

BIBLIOGRAPHY

OFFICIAL PUBLICATIONS

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The Sarawak Civil Service List
The Sarawak Government Gazette (twice monthly)
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Sarawak Museum Journal
Report of the Borneo Salaries Commission (1947)
Handbook of Sarawak (1949)
Annual Reports of the Geological Survey Department (1949, 1950, 1951, and 1952)
The Natural Resources of Sarawak (Second Edition, 1952)

BOOKS

- The Expedition to Borneo of H.M.S. Dido for the Suppression of Piracy* (containing extracts from the journals of Sir James Brooke, the first Rajah)—Captain H. Keppel, R.N. (1846)
Low's Sarawak—Hugh Low (1848)
Rajah Brooke's Journals (the first Rajah)—Captain Mundy, R.N. (1848)
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Seventeen Years among the Sea Dayaks of Borneo—Gomes (1911)
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- My Life in Sarawak*—Margaret, Ranee of Sarawak (1913)
Borneo, the Land of River and Palm—Eda Green (1919)
Sarawak (a handbook written for the Malaya-Borneo Exhibition, Singapore, 1922)—Sylvia, Ranee of Sarawak
Letters from Sarawak—Harriette McDougall, wife of Francis McDougall, first Bishop of Labuan (1924)
Rajah Brooke and Baroness Burdett-Coutts (Letters)—Owen Rutter (1936)
The Three White Rajahs—Sylvia, Ranee of Sarawak (1939)
A Naturalist in Sarawak—E. Banks (Kuching Press, 1949)
Bornean Mammals—E. Banks (Kuching Press, 1949)
James Brooke of Sarawak—Emily Hahn (1953)
Bornean Jungle—Tom Harrisson (1938)
Sarawak and Its Government—Hugh Hickling (1954)

APPENDICES

APPENDIX A
COLONIAL DEVELOPMENT AND WELFARE SCHEMES—SARAWAK ALLOCATION

<i>Scheme Number</i>	<i>Title of Scheme</i>	<i>Total Grant</i>	<i>Actual expenditure to 31.12.54</i>	<i>Estimated expenditure 1955</i>	<i>Balance of scheme</i>	
		\$	\$	\$	\$	
	AGRICULTURE					
D. 816 and D. 816A	Agricultural Soil Survey	128,800	102,599	—	* 26,201	Completed
D. 826	Rubber Improvement (Extension)	83,228	64,617	—	* 18,611	Completed
D. 954	Cultivation of Cash Crops	128,000	100,960	—	* 27,040	Completed
D. 968	Visit of Malayan Irrigation Engineer +	2,571	1,934	—	* 637	Completed
D. 973 and D. 973A	Mechanical Cultivation	136,140	82,709	—	* 53,431	Completed
D. 1208 and D. 1208A-B	Rice Cultivation—Paya Megok	569,908	422,410	66,447	81,051	Completed
D. 1424	Cocoa Seed Production Station	17,950	14,465	1,060	2,425	Completed
D. 1519	Department of Agriculture Staff Training School	100,000	99,755	—	* 245	Completed
D. 1664	Farm Mechanisation	163,500	153,444	—	10,056	
D. 2080	Rice Cultivation—Niah/Sibuti	93,428	51,497	28,237	13,694	
	CIVIL AVIATION					
D. 913A-B	Kuching Airport (Supplementary	291,916	291,432	—	* 484	Completed
D. 1542 and D. 1542A	Sibu Airfield	180,000	180,000	—	—	Completed
D. 1923	Sibu Airfield—Buildings	281,000	247,587	33,413	—	
	EDUCATION					
D. 838	Rural Improvement School, Kanowit	275,194	248,092	—	* 27,102	Completed
D. 839 and D. 839A	Eatu Lintang Teacher-Training Centre and School	901,373	(1) 544,607	—	* 356,766	Completed
D. 1871	Grants for Domestic Science Rooms	(2) 240,000	47,357	72,643	120,000	Completed
D. 1875	Grants for Science Laboratories	(3) 360,000	114,113	25,987	199,000	Completed

D. 837 and D. 837A	Training of Fishery Survey Officer + Fisheries Survey +	3,428 77,787	3,428 (4) 69,995	— —	* 7,792	Completed Completed
	FORESTRY					
D. 1120 D.	Forestry Development Timber Plantations	392,694 81,115	251,421 —	94,185 9,680	47,088 71,435	
	GOVERNMENT BUILDINGS					
D. 1430 and D. 1430A	Senior Service Quarters	226,011	217,383	—	* 8,628	Completed
	MEDICAL					
D. 830 D. 2442	Travelling Dispensaries Mental Hospital	670,000 1,500,000	639,383 —	— 1,500,000	* 30,617 —	Completed
	PORT DEVELOPMENT					
D. 1273	Test Bores, Rejang and Kuching Rivers	79,971	75,559	—	* 4,412	Completed
	ROADS AND BRIDGES					
D. 944	Secondary Roads and Telecommunications	102,171	98,911	—	* 3,260	Completed
D. 1076 and D. 1076A-E	Road Development Scheme	2,216,916	2,085,628	9,186	122,102	
	TOTAL, SARAWAK ALLOCATION	9,303,101	6,209,286	1,880,738	1,213,077	

* Saving on Scheme.

+ Completed before commencement of Development Plan.

Note: (1) Amount represents net expenditure after deducting a revenue of \$119,456 earned by the Scheme.

(2) Includes new provision of \$160,000 for the second phase of the Scheme.

(3) Includes new provision of \$210,000 for the second phase of the Scheme.

(4) Amount represents net expenditure after deducting a revenue of \$7,554 earned by the Scheme.

COLONIAL DEVELOPMENT AND WELFARE SCHEMES—JOINT BORNEO ALLOCATION

<i>Scheme Number</i>	<i>Title of Scheme</i>	<i>Total Grant</i>	<i>Actual expenditure to 31.12.54</i>	<i>Estimated expenditure 1955</i>	<i>Balance of scheme</i>	
D. 823	Coal Investigation + ...	\$ 92,143	\$ 92,143	\$ —	\$ —	Completed
D. 804 and D. 804A-D	Sarawak Population Census and Printing of Census Tables + ...	224,211	223,902	—	*	Completed
D. 913	Kuching Airport ...	411,428	411,428	—	—	Completed
D. 1828	Central Mental Hospital ...	15,228	15,228	—	—	Scheme abandoned
	TOTAL, JOINT BORNEO ALLOCATION	743,010	742,701	—	309	

COLONIAL DEVELOPMENT AND WELFARE SCHEMES—CENTRAL ALLOCATIONS

D. 1109 and D. 1109A	Combined Geological Survey ...	844,352	844,352	—	—	Completed
D. 1109B	Combined Geological Survey ...	625,412	187,032	279,701	158,679	Completed
D. 1119(i)	Combined Geological Survey ...	5,047	5,047	—	—	Completed
D. 1749	Broadcasting Service ...	406,283	405,536	—	*	Completed
D. 1692	Meteorological Service ...	197,990	169,753	—	*	Completed
D. 1117 and D. 1117A-E	Aeronautical Telecommunications	402,000	386,784	6,468	8,748	Completed
D. 1924	Aeronautical Equipment, Sibul ...	81,000	46,053	34,947	—	Completed
D. 2233	Rice Investigations (pot culture experiments) ...	30,000	1,837	13,991	15,172	Completed
D. 2311	Rice Investigations (Wet Padi Land Surveys) ...	220,000	—	220,000	—	Completed
R. 209 and R. 209A	Fisheries Survey + ...	77,786	(4) 69,995	—	*	Completed
R. 270 and R. 270A-G	Sociological Research (Melanau, Iban, Land Dayak and Chinese Projects) ...	93,266	88,704	—	*	Completed
R. 483	Sociological Research (Malay Project)	6,000	5,917	—	*	Completed
R. 618	Pepper Disease Investigations ...	85,714	—	25,671	83 60,043	Completed
	TOTAL, CENTRAL ALLOCATIONS ...	3,074,850	2,211,010	579,778	284,062	

<i>Title of Scheme</i>	<i>Total estimated cost of Scheme</i>	<i>Actual expenditure to 31.12.54</i>	<i>Estimated expenditure 1955</i>	<i>Balance of scheme</i>	
W.H.O. Anti Malarial Survey, Local Contribution					
Anti Malaria Work ...	75,000	74,712	—	288	
Sibu Hospital (First Stage) ...	4,000,000	—	150,000	3,850,000	
Simanggang Hospital extension (First Stage) ...	300,000	—	300,000	—	
Kuching Hospital ...	82,500	—	82,500	—	
Mental Hospital ...	347,600	—	347,600	—	
Dispensaries ...	500,000	—	500,000	—	
	70,000	—	70,000	—	
	(7,619,173)	(904,962)	(1,666,787)	(5,047,424)	
METEOROLOGICAL					
Meteorological Service ...	135,000	18,739	—	* 116,261	Transferred to recurrent budget from 1.1.54
PORT DEVELOPMENT					
Gunong Ayer ...	1,000,000	16,990	140,000	843,010	
Sibu ...	2,300,000	660,130	1,221,225	418,645	
Miri Port Development ...	170,000	383	100,617	69,000	
Kuching Port Development ...	5,750,000	605,079	950,000	4,194,921	
Kuala Baram Wharf ...	117,500	—	117,500	—	
Miri Wharfage ...	24,000	—	24,000	—	
Brooke Dockyard ...	800,000	159,366	234,625	406,009	
	(10,161,500)	(1,441,948)	(2,787,967)	(5,931,585)	
RESEARCH AND INVESTIGATIONS					
Preliminary Survey (P.W.D.) ...	50,000	2,082	37,500	10,418	
Grading of Timber ...	4,800	740	4,060	—	

Electricity Supplies, Kuching	...	...	...	...	46,500	46,500	—	Completed
Electricity Supplies ...	...	...	...	...	4,000,000	3,275,200	700,000	24,800
					(4,046,500)	(3,321,700)	(700,000)	(24,800)
GEOLOGICAL SURVEY								
Combined Geological Survey	...	...	...	...	360,000	253,113	90,000	34,887
GOVERNMENT BUILDINGS								
Rehabilitation of Lundu Station	...	...	...	...	348,000	334,939	13,061	—
New Government Office, Kuching	...	...	...	...	1,200,000	963,341	236,659	—
Extension of Government Office, Simanggang	...	...	...	...	58,000	57,687	—	*
New District Office, Lawas	...	...	...	...	48,000	47,679	—	*
P.W.D. Garage, Kuching	...	...	...	...	280,000	272,517	7,483	313
P.W.D. Depot (First and Second Divisions)	...	...	...	...	240,000	3,870	220,000	—
Miri Government Offices, extension	...	...	...	...	57,000	27,404	29,596	16,130
Sarikei Government Offices, extension	...	...	...	...	53,000	—	53,000	—
					(2,284,000)	(1,707,437)	((559,799)	(16,764)
HOUSING								
Miri Housing Scheme	...	...	...	...	570,000	—	570,000	—
Kuching Housing Scheme	...	...	...	...	3,450,000	—	2,000,000	1,450,000
					(4,020,000)		(2,570,000)	(1,450,000)
LAND								
Land Utilisation and Development	...	...	...	...	2,500,000	—	427,130	2,072,870
MEDICAL								
Health Centre, Kuching	...	...	...	...	322,500	281,283	41,217	—
Leper Settlement Buildings	...	...	...	...	600,000	294,478	166,470	139,052
Travelling Dispensaries	...	...	...	...	1,036,573	146,458	—	890,115
Extension of Anti-Tuberculosis Facilities, Kuching,	...	...	...	...	210,000	52,891	4,500	152,609
Anti-Tuberculosis Campaign	...	...	...	...	75,000	55,140	4,500	15,360

* Saving on Scheme.

Note: (6) For equipment and water supply.

DEVELOPMENT PLAN SCHEMES—COLONY FUNDS.—(Contd.)

<i>Title of Scheme</i>	<i>Total estimated cost of Scheme</i>	<i>Actual expenditure to 31.12.54</i>	<i>Estimated expenditure 1955</i>	<i>Balance of scheme</i>	
COMMUNITY DEVELOPMENT					
Henghua Fishermen's Housing Scheme, Kuching	152,211	127,981	22,224	2,006	
Muara Tuang Community Development First Division	47,800	17,148	11,850	18,802	
Budu Community Development Scheme, Second Division	162,075	48,877	49,280	63,918	
Adult Literacy Work, Lower Sadong	850	—	850	—	
Contribution to Sarawak Council for Adult Education	6,003	—	6,000	—	
Staff	178,000	—	27,046	150,954	
	(546,936)	(194,006)	(117,250)	(235,680)	
EDUCATION					
Rural Improvement School, Kanowit	369,165	184,013	(6) 5,650	* 179,502	Transferred to recurrent budget from 1.1.54
Buildings—Rural Improvement School, Kanowit	185,400	156,703	26,670	2,027	
Batu Lintang Teacher-Training Centre and School	935,000	150,430	—	* 784,570	Transferred to recurrent budget from 1.1.54
Local Scholarships	250,000	—	50,000	200,000	
Overseas Scholarships	1,300,000	271,196	200,000	828,804	
Production of Vernacular Literature	120,000	740	20,000	99,260	
Trade and Technical Education	750,000	—	2,000	748,000	
	(3,909,565)	(763,082)	(304,320)	(2,842,163)	
FISHERIES					
Fisheries Survey	12,857	12,857	—	—	Completed
Marine Fisheries Research Station, Singapore	51,720	1,950	15,000	34,770	
Fishery Development	224,624	111,356	59,896	53,372	
Freehawater Fisheries	10,000		0,000	0,000	

DEVELOPMENT PLAN SCHEMES—COLONY FUNDS

<i>Title of Scheme</i>	<i>Total estimated cost of Scheme</i>	<i>Actual expenditure to 31.12.54</i>	<i>Estimated expenditure 1955</i>	<i>Balance of scheme</i>		
AGRICULTURE						
Agricultural Credit—Loan to Co-operative Central Bank	\$ 1,000,000	\$ —	\$ 250,000	\$ 750,000	Contribution of 60% towards re-current expenditure of Joint Borneo Territories Research Institute Capital Expenditure be met from C.D. & W. Scheme (Central Allocation) Administered by North Borneo	
Fertiliser Manufacture	15,000	4,757	2,000	8,243		
Development of Farm Mechanisation	477,000	249,775	40,000	187,225		
Rice Cultivation—Paya Megok	139,074	76,621	23,820	38,633		
Rice Cultivation—Niah/Sibuti	93,428	51,497	28,237	13,694		
Animal Husbandry (Purchase of Livestock)	100,000	46,048	34,145	19,807		
Veterinary Clinics	125,000	—	88,800	36,200		
Pepper Disease Investigations	108,214	—	48,171	60,043		
Regional Agricultural Research Institute	87,300	—	30,000	57,300		
Rice Investigation (Padi developments—Bijat and Pajut Lopeng)	14,000	—	14,000	—		
Rubber Planting	1,500,000	—	300,000	1,200,000		
Rubber Research	500,000	100,000	100,000	300,000		
Sago Industry	500,000	6,694	5,000	488,306		
	(4,659,016)	(535,392)	(964,173)	(3,159,451)		
BROADCASTING						
Establishment of Broadcasting Service	516,848	491,134	25,714	—		
CIVIL AVIATION						
Kuching Airfield	65,500	27,871	34,500	3,129	Completed	
Sibu Airfield	156,000	151,346	—	4,654		
Sibu Airfield, extension	340,000	—	200,000	140,000		
Bintulu Airfield—Reconstruction	170,000	60,841	109,159	—		
Airport Equipment, fire-fighting	126,250	—	126,250	—		
Internal Air Service	17,334	3,992	13,334	8		
	(875,084)	(244,050)	(483,243)	(147,791)		

APPENDIX

ROADS, BRIDGES AND WHARVES

Road Reconstruction Programme	...	16,700,000	7,786,714	4,266,064	4,647,222	Completed
Oil Storage Depot, Bukit Biawak, Kuching	...	271,650	223,972	47,678	—	Completed
Oil Storage Depot, Sungei Merah, Sibü	...	45,000	43,033	1,967	—	Completed
Kuching-Serian Road (Sarawak contribution)	...	157,723	157,723	—	—	Completed
Survey Serian/Simanggang Road	...	306,509	306,509	—	—	Completed
Serian/Simanggang Road	...	10,000,000	56,666	2,000,000	7,943,334	Completed
Access Road to Kuching Airport	...	66,918	66,918	—	—	Completed
Miri/Bekenu Road (Brighton Road Section)	...	90,000	—	90,000	—	Completed
Bulat Road, Sarikei	...	30,000	—	30,000	—	Completed
Minor Roads and Paths	...	3,000,000	—	500,000	2,500,000	Completed
		(30,667,800)	(8,641,535)	(6,935,709)	(15,090,556)	

SOCIAL WELFARE

Girls' Home	...	70,000	—	70,000	—	Completed
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TELECOMMUNICATIONS

Survey of Telecommunications Plan	...	10,540	10,540	—	—	Completed
V.H.F. Radio/Telephone	...	4,968,100	2,759,731	1,613,740	594,629	Completed
Multi-Channel V.H.F. Radio	...	2,000,000	—	55,715	1,944,285	Completed
Telephone Exchange, Kuching	...	1,396,679	921,598	475,081	—	Completed
Telephone Exchange, Sibü	...	424,480	230,848	193,632	—	Completed
Telephone Exchange, Miri	...	302,456	149,046	134,174	19,236	Completed
Improvement of W/T Service at Simanggang	...	11,750	11,131	569	—	Completed
Outstation Telephone System	...	425,000	229,569	196,431	—	Completed
Contingencies	...	19,441	11,855	7,586	—	Completed
Aeronautical Telecommunications	...	539,650	371,842	135,964	85,844	Completed
		(10,152,046)	(4,696,160)	(2,811,892)	(2,643,994)	

SOCIOLOGICAL RESEARCH

Sarawak Contribution to C.D. & W. Scheme R. 270	7,903	7,515	—	*	388	Completed
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* Saving on Scheme.

DEVELOPMENT PLAN SCHEMES—COLONY FUNDS.—(Contd.)

<i>Title of Scheme</i>	<i>Total estimated cost of Scheme</i>	<i>Actual expenditure to 31.12.54</i>	<i>Estimated expenditure 1955</i>	<i>Balance of scheme</i>	
	\$	\$	\$	\$	
TOWN DEVELOPMENT					
Limbang Bazaar	154,700	120,512	34,188	—	
Bekenu Bazaar	98,600	81,620	16,980	—	
Simanggang Bazaar	168,500	115,640	52,860	—	
Sibu Bazaar	1,220,000	407,632	294,333	518,035	
Miri Bazaar	300,000	800	134,000	165,200	
Kampong Gita, Kuching	602,000	—	500,000	102,000	
Simunjan Bazaar (Preliminary works)	75,000	—	75,000	—	
Panchor Bazaar	10,000	—	10,000	—	
Bazaar Drains	500,000	—	87,500	412,500	
	(3,128,800)	(726,204)	(1,204,861)	(1,197,735)	
WATER SUPPLIES					
Batu Kitang Scheme, Kuching	3,300,000	1,263,664	1,335,000	701,336	Completed
Sungei China Pipeline, Kuching	340,608	340,608	—	—	
Simunjan	69,000	61,399	7,601	—	
Sarikei	400,000	69,937	330,063	—	
Bau	60,000	54,828	—	5,172	
Miri	343,500	56,399	143,500	143,601	
Limbang (Improvements)	21,000	15,022	5,978	—	
Sibu (Extensions)	214,000	11,501	202,499	—	
Lawas	88,000	—	88,000	—	
	(4,836,108)	(1,873,358)	(2,112,641)	(850,109)	
WATERWAYS					
Sungei Kut Canal	400,000	116,935	100,000	183,065	
Baram District (Blasting of rocks on rapids)	69,600	35,420	34,180	—	
River Works (anti erosion works)	228,500	—	228,500	—	
	(698,100)	(152,355)	(362,680)	(183,065)	

Agricultural and Engineer Officers	...	853,650	326,976	208,517	318,157
PLANT AND EQUIPMENT					
P.W.D. Plant and Equipment	...	500,000	—	250,000	250,000
TOTAL		\$92,902,030	\$26,410,651	\$24,771,139	\$41,720,240

TABLE I. CASES REPORTED TO AND DEALT WITH BY THE POLICE 1954.

OFFENCES	Pending at 31.12.1953	Total Reported in 1954	Pending inves- tigation at 31.12.1954	Referred to Native (or Local) Courts	Not taken to Court				Taken to Court				Awaiting trial at 31.12.1953
					Total	Civil, no case in law; trivial or found false	Evidence in- sufficient, or undetected, etc.	Accused dead or insane	Total	Convicted	Dismissed	No!le Prosequi	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Against lawful authority													
Against public order		31	1		3	3			27	25	2		
Perjury		1							1	1			
Escape and rescue		5							5	4	1		
Against public morality													
Rape and indecent assault		9	1	1					7	5	2		
Unnatural offences		1							1		1		
Other		2		1	1	1							
Against the person													
Murder and manslaughter		26	5		2	1		1	19	14	3	2	
Attempted murder and suicide		26	1		6	6			19	18		1	
Grievous harm, wounding, etc.		15	3						12	9	2		
Assaults		1096	2		1026	1019	7		68	60	7		
Other		11			2	1	1		9	9		1	
Against property													
Thefts and other stealings		882	92		593	63	530	1	197	170	25	2	
Robbery and extortion		13			3	2			10	9	1		
Burglary, house and store breaking		59	14		11	1	10		34	21	13		
False pretences, cheating, fraud, etc.		122	26		47	23	24		49	45	3	1	
Receiving stolen property		8							8	4	4		
Arson		3			3	2	1						
Other													
Against the Penal Code													
Forgery and coinage		1											
Other		419	44		195	177	18		1	1			
Against Local Laws									180	142	20	18	
Against Traffic Ordinance		3597	504		663	663			2430	2410	20		
Against Arms and Explo- sives Ordinance		25							25	24	1		
Against Dangerous Drugs and Poison Ordinances		56	14		2	2			40	38	2		
Gambling		65	11		10	10			44	37	7		
Other		425	43		59	57	2		323	310	10	3	
Total		6898	761	2	2626	2031	593	2	3509	3456	124	29	

NOT AVAILABLE

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